

From: Huang, Evelyn
Sent: Monday, August 19, 2002 6:36 PM
To: STIC-ILL
Subject: ILL_Order--09945325

RS164, P7
#21.00

AN 1998:574237 CAPLUS

DN 129:328033

TI Quinolones from a bacterium and tyrosine metabolites from its host sponge, *Suberea creba* from the Coral Sea
AU Debitus, Cecile; Guella, Graziano; Mancini, Ines; Waikedre, Jean; Guemas, Jean-Pierre; Nicolas, Jean Louis; Pietra, Francesco
CS ORSTOM, Centre de Noumea, Noumea, New Caledonia
SO Journal of Marine Biotechnology (1998), 6(3), 136-141
CODEN: JMBOEW; ISSN: 0941-2905
PB Springer-Verlag New York Inc.
DT Journal

AN 1997:233949 CAPLUS

DN 126:277634

TI A new two-step synthesis of quinolone alkaloids based on the regioselective addition of organometallic reagents to 4-silyloxyquinolinium triflates
AU Beifuss, Uwe; Ledderhose, Sabine
CS Institut Organische Chemie, Georg-August-Universitat, Goettingen, D-37077, Germany
SO Synlett (1997), (3), 313-315
CODEN: SYNLES; ISSN: 0936-5214
PB Thieme
DT Journal

AN 1995:218752 CAPLUS

DN 122:51400

TI 2-Alkyl-4-quinolone alkaloids and cinnamic acid derivatives from *Esenbeckia almawillia*
AU Guilhon, Giselle M. S. P.; Baetas, Cristina S.; Maia, Jose Guilherme S.; Conserva, Lucia M.
CS Departamento de Quimica, Universidade Federal do Para, Belem-PA, 66040, Brazil
SO Phytochemistry (1994), 37(4), 1193-5
CODEN: PYTCAS; ISSN: 0031-9422
DT Journal

AN 2000:67382 CAPLUS

DN 132:342910

TI Flow cytometric analysis of the schinifoline inhibition on rat hepatoma cell induced by DEN
AU Bai, Jinwen; Zhang, Ying; Wu, Jing
CS Beijing University of Traditional Chinese Medicine, Beijing, 100029, Peop. Rep. China
SO Beijing Zhongyiyo Daxue Xuebao (1999), 22(6), 34-35
CODEN: BZDXF5; ISSN: 1006-2157
PB Beijing Zhongyiyo Daxue Xuebao Bianjibu
DT Journal

AN 1999:43722 CAPLUS

DN 130:200809

TI Quinoline alkaloids from the fruits of *Evodia officinalis*
AU Shin, Hyen-Kil; Do, Jae-Chul; Son, Jong-Keun; Lee, Chong-Soon; Lee, Chul-Hyun; Cheong, Chae-Joon
CS College Pharmacy, Yeungnam University, Gyongsan, 712, S. Korea
SO Planta Medica (1998), 64(8), 764-765
CODEN: PLMEA; ISSN: 0032-0943

STIC-ILL

NO 408834

From: Huang, Evelyn
Sent: Monday, August 19, 2002 6:36 PM
To: STIC-ILL 1625
Subject: ILL_Order-09945325

AN 1998:574237 CAPLUS
DN 129:328033

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Suberea creba from the Coral Sea
AU Debitus, Cecile; Guella, Graziano; Mancini, Ines; Waikedre, Jean; Guemas,
Jean-Pierre; Nicolas, Jean Louis; Pietra, Francesco
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SO Journal of Marine Biotechnology (1998), 6(3), 136-141
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AU Beifuss, Uwe; Ledderhose, Sabine
CS Institut Organische Chemie, Georg-August-Universitat, Goettingen, D-37077,
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SO Synlett (1997), (3), 313-315
CODEN: SYNLES; ISSN: 0936-5214
PB Thieme
DT Journal

D 232009P

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DN 122:51400

TI 2-Alkyl-4-quinolone alkaloids and cinnamic acid derivatives from
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AU Guilhon, Giselle M. S. P.; Baetas, Cristina S.; Maia, Jose Guilherme S.;
Conserva, Lucia M.
CS Departamento de Quimica, Universidade Federal do Para, Belém-PA, 66040,
Brazil
SO Phytochemistry (1994), 37(4), 1193-5
CODEN: PYTCAS; ISSN: 0031-9422
DT Journal

COMPLETED

AN 2000:67382 CAPLUS
DN 132:342910

TI Flow cytometric analysis of the schinifoline inhibition on rat hepatoma
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AU Bai, Jinwen; Zhang, Ying; Wu, Jing
CS Beijing University of Traditional Chinese Medicine, Beijing, 100029, Peop.
Rep. China
SO Beijing Zhongyiyo Daxue Xuebao (1999), 22(6), 34-35
CODEN: BZDXF5; ISSN: 1006-2157
PB Beijing Zhongyiyo Daxue Xuebao Bianjibu
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Chul-Hyun; Cheong, Chae-Joon
CS College Pharmacy, Yeungnam University, Gyongsan, 712, S. Korea
SO Planta Medica (1998), 64(8), 764-765
CODEN: PLMEA; ISSN: 0032-0943

L Number	Hits	Search Text	DB	Time stamp
1	44	autoinducer	USPAT	2002/08/19 16:07
2	31	autoinducer	US-PGPUB; EPO; JPO; DERWENT	2002/08/19 16:14

- Drafts
- Pending
- Active
 - L1: (44) autoinducer
 - L2: (31) autoinducer
- Failed
- Saved

Search	List	Browse	Queue	Clear
DBs: US-PGPUB; EPO; JPO; DERWENT				
Default operator: OR				
autoinducer				
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U	I	1	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval C
1	<input type="checkbox"/>	<input type="checkbox"/>	US 20020107364 A1	20020808	57	Compositions and methods for regulating bacterial pathogenesis	530/350		
2	<input type="checkbox"/>	<input type="checkbox"/>	US 20020102271 A1	20020801	23	Target of RNAIII activating protein (TRAP)	424/190.1	435/252.3; 530/350;	
3	<input type="checkbox"/>	<input type="checkbox"/>	US 20020090659 A1	20020711	62	Detection and visualization of neoplastic tissues and other tissues	435/7.23	424/9.6	
4	<input type="checkbox"/>	<input type="checkbox"/>	US 20020081686 A1	20020627	24	Novel antimicrobial therapies	435/184	424/93.4; 424/93.47;	
5	<input type="checkbox"/>	<input type="checkbox"/>	US 20020072052 A1	20020613	57	Compositions and methods for regulating bacterial pathogenesis	435/4	435/29	
6	<input type="checkbox"/>	<input type="checkbox"/>	US 20020068330 A1	20020606	21	E. coli, Salmonella or Hafnia autoinducers	435/71.3	435/170; 435/41	
7	<input type="checkbox"/>	<input type="checkbox"/>	US 20020058327 A1	20020516	33	Materials and methods for the enhancement of effective root nodulation	435/252.2	435/34; 504/117	
8	<input type="checkbox"/>	<input type="checkbox"/>	US 20020040485 A1	20020404	21	TRANSGENIC SYSTEMS FOR THE MANUFACTURE OF	800/278	800/298	
9	<input type="checkbox"/>	<input type="checkbox"/>	US 20020009454 A1	20020124	54	Composition and method for treating inflammatory diseases	424/178.1		
10	<input type="checkbox"/>	<input type="checkbox"/>	US 20020004942 A1	20020110	82	Bioluminescent novelty items	800/288		
11	<input type="checkbox"/>	<input type="checkbox"/>	WO 9965889 A1	19991223	38	AUTOINDUCER COMPOUNDS			
12	<input type="checkbox"/>	<input type="checkbox"/>	WO 9853047 A1	19981126	48	E. COLI, SALMONELLA OR HAFNIA AUTOINDUCERS			
13	<input type="checkbox"/>	<input type="checkbox"/>	WO 9218614 A1	19921029	53	AUTOINDUCER		435/244	
14	<input type="checkbox"/>	<input type="checkbox"/>	WO 200218342 A	20020307	42	New quinoline, benzopyran and benzothiopyran derivatives, useful in			
15	<input type="checkbox"/>	<input type="checkbox"/>	WO 200216623 A	20020228	82	Polynucleotide encoding autoinducer inactivation protein, bacterium having			
16	<input type="checkbox"/>	<input type="checkbox"/>	WO 200194543 A	20011217	88	Analogue of autoinducer molecule compounds are derivatized to allow their			
17	<input type="checkbox"/>	<input type="checkbox"/>	WO 200185664 A	20011120	134	Use of autoinducer-2 agonists or antagonists for regulating activity of			
18	<input type="checkbox"/>	<input type="checkbox"/>	WO 200174801 A	20011015	37	N-(3-Oxoacyl)homoserine lactones and related 3-substituent compounds as			
19	<input type="checkbox"/>	<input type="checkbox"/>	WO 200102578 A	20020402	49	New bacterial autoinducer inactivation proteins and nucleic acids encoding the			
20	<input type="checkbox"/>	<input type="checkbox"/>	WO 200058441 A	20001005	36	Polynucleotide and polypeptide of luxS autoinducer synthesis family, useful for			
21	<input type="checkbox"/>	<input type="checkbox"/>	US 20020072052 A	20020613	57	New isolated bacterial signaling factor, useful e.g. for detecting potential			
22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WO 200032747 A	20000619		Promoting the growth of a Campylobacter bacterium, useful in			
23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WO 200006177 A	20000210		Modulating activity of an autoinducer synthase e.g. to control bacterial growth,			
24	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 6337347 B	20020108		Autoinducer compounds used to enhance and regulate gene expression			
25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP 939129 A	19990901		New mutant Rhizobium strain useful for increasing the amount of nitrogen-fixing			
26	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WO 9933966 A	20001011		New mutant Rhizobium etli strain, useful to increase nodule numbers and nitrogen			
27	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 6316244 B	20020606		Bacterial autoinducer useful in, e.g. fermentation processes - is produced in			
28	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 5759798 A	19980602		Assay for light-dependent detection of auto:inducer(s) - uses mutant			
29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 5591872 A	19970107		New auto-inducer(s), e.g. N-(3-oxo-dodecanoyl) homoserine			
30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 5196318 A	19930323		Expression system based on regulation of bacterial luminescence - comprises			



Courier New

14

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
7 March 2002 (07.03.2002)(10) International Publication Number
WO 02/18342 A2

PCT

(51) International Patent Classification⁷: C07D 215/00[US/US]; 4020 Stewart Road, Iowa City, IA 52240 (US).
IGLEWSKI, Barbara, H. [US/US]; 8 McCoord Woods,
Fairport, NY 14450 (US).

(21) International Application Number: PCT/US01/27165

(74) Agents: HANLEY, Elizabeth, A. et al.; Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109 (US).

(22) International Filing Date: 31 August 2001 (31.08.2001)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(25) Filing Language: English

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(30) Priority Data:
60/229,715 31 August 2000 (31.08.2000) US

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicants (for all designated States except US): THE UNIVERSITY OF IOWA RESEARCH FOUNDATION [US/US]; 214 Technology Innovation Center, Iowa City, IA 52242 (US). UNIVERSITY OF ROCHESTER [US/US]; 518 Hylan Building, Rochester, NY 14627-0140 (US). EAST CAROLINA UNIVERSITY [US/US]; Medical Science Building, 2W-33 Brody University, Greenville, NC 27858 (US).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors; and

(75) Inventors/Applicants (for US only): PESCI, Everett, C [US/US]; 110 Lee Street, Greenville, NC 27858 (US). MILBANK, Jared, B, J [US/NZ]; 2/25 Essex Road, Mount Eden (NZ). PEARSON, James, P. [US/US]; 14 Gray Street, Cambridge, MA 02138 (US). KENDE, Andrew, S. [US/US]; 19 Larchwood Drive, Pittsford, NY 14534 (US). GREENBERG, Everett, Peter

WO 02/18342 A2

(54) Title: NOVEL AUTOINDUCER MOLECULES AND USES THEREFOR

(57) Abstract: Novel bacterial quinolone signal molecules and, more particularly, pseudomonas quinolone signal ("PQS") molecules, e.g., 2-heptyl-3-hydroxy-4-quinolone, and analogs and derivatives thereof are described. Therapeutic compositions containing the molecules, and therapeutic methods, methods of regulating gene expression, methods for identifying modulators of the autoinducer molecules, and methods of modulating quorum sensing signalling in bacteria using the compounds of the invention are also described.



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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
13 December 2001 (13.12.2001)(10) International Publication Number
WO 01/94543 A2

PCT

(51) International Patent Classification[†]: C12N (74) Agents: MANN, Jeffry, S. et al.; Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834 (US).

(21) International Application Number: PCT/US01/17272 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

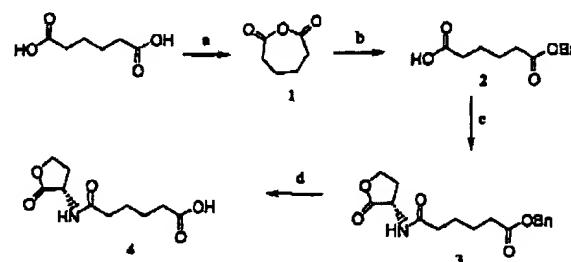
(22) International Filing Date: 25 May 2001 (25.05.2001) (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English (71) Applicant (for all designated States except US): K-QUAY ENTERPRISES, LLC [US/US]; 23632 Highway 99, Suite F-454, Edmonds, WA 98026 (US).

(26) Publication Language: English (72) Inventor; and (75) Inventor/Applicant (for US only): QUAY, Steven, C. [US/US]; 23632 Highway 99, Suite F-454, Edmonds, WA 98026 (US). Published: — without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: PRODUCTION AND USE OF DERIVATIZED HOMOSERINE LACTONES

Scheme 1[†]

[†]
a. Ac_2O , reflux; b. $\text{C}_6\text{H}_5\text{CH}_2\text{OHCH}_2\text{Cl}_2$; c. homoserine lactone hydrobromide, EDC, HCl , CH_2Cl_2 , pyridine; d. Pd/C , H_2 , EtOAc .

WO 01/94543 A2

(57) Abstract: The present invention provides analogues of autoinducer molecules that are derivatized to allow their attachment to other molecules and surfaces. Libraries of the autoinducer analogues are also contemplated. Also provided are methods for using the compounds of the invention to produce compositions, such as immunoconjugates, antibodies and vaccines, which are useful for treating and preventing disease states in a subject. The compositions of the invention are also useful in various assays, including assessing the autoinducer load in a subject.

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(FILE 'HOME' ENTERED AT 16:35:47 ON 19 AUG 2002)

FILE 'REGISTRY' ENTERED AT 16:35:55 ON 19 AUG 2002

L1 STRUCTURE UPLOADED
L2 17 S L1
L3 326 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:38:35 ON 19 AUG 2002

L4 198 S L3

FILE 'STNGUIDE' ENTERED AT 16:38:54 ON 19 AUG 2002

FILE 'REGISTRY' ENTERED AT 16:41:54 ON 19 AUG 2002

L5 STRUCTURE UPLOADED
L6 8 S L5 SUB=L3 SAMPLE
L7 117 S L5 SUB=L3 FULL

FILE 'CAPLUS' ENTERED AT 16:44:19 ON 19 AUG 2002

L8 99 S L7
L9 10 S L8 AND PATENT/DT
L10 89 S L8 NOT L9
L11 87 S L10 NOT BUTYL
L12 3 S 135015-64-4/RN
L13 87 S L11 NOT L12
L14 9 S L13 AND HEPTYL
L15 23 S L2
L16 23 S L15 NOT L9
L17 23 S L16 NOT L14
L18 5 S L17 AND PATENT/DT
L19 18 S L17 NOT L18
L20 0 S L19 AND THIOPYRAN?
L21 1 S L19 AND BENZOTHIOPYRAN?

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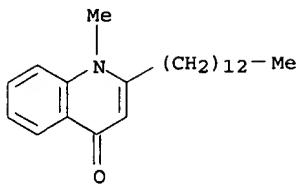
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L24 19 S L23 NOT L9
L25 15 S L7/THU
L26 11 S L25 NOT L9
L27 11 S L26 NOT L14

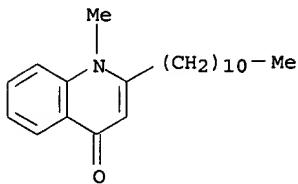
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L27 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2001:589115 CAPLUS
DN 136:58641
TI Chemical constituents of refined *Evodia rutaecarpa* capsule
AU Yang, Xiuwei; Xiao, Shiyi; Yang, Zhi; Du, Lijun; Bi, Kaishun; Chen, Dawei; Chen, Daofeng; Wang, Zhimin; Zou, Yihuai
CS National Research Laboratory of Natural and Biomimetic Drugs, Peking University, Beijing, 100083, Peop. Rep. China
SO Beijing Daxue Xuebao, Yixueban (2001), 33(3), 280-282
CODEN: BDXYAH
PB Beijing Daxue
DT Journal
LA Chinese
AB *Evodia rutaecarpa* capsule was prep'd. from *Evodia rutaecarpa*, *Zingiber officinale*, *Panax ginseng*, and *Ziziphus jujuba* at a ratio of 3:6:3:2. Eight compds. were identified as rutaecarpine, evodiamine, 1-methyl-2-nonyl-4(1H)-quinolone, 1-methyl-2-undecyl-4(1H)-quinolone, 1-methyl-2-tridecyl-4(1H)-quinolone, limonin, (R)-ginsenoside Rg2, and 20(S)-ginsenoside Rg2 in the capsule.
IT 15266-35-0P, 1-Methyl-2-tridecyl-4(1H)-quinolone
59443-02-6P, 1-Methyl-2-undecyl-4(1H)-quinolone
68353-24-2P, 4(1H)-Quinolinone, 1-methyl-2-nonyl-
RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(chem. constituents of refined *Evodia rutaecarpa* capsule)
RN 15266-35-0 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-tridecyl- (9CI) (CA INDEX NAME)

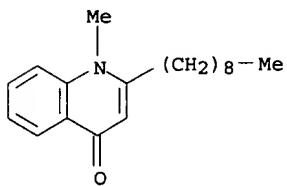
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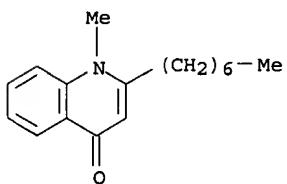
RN 59443-02-6 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-undecyl- (9CI) (CA INDEX NAME)



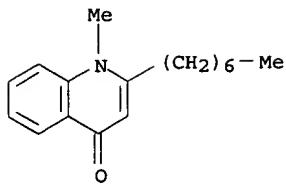
RN 68353-24-2 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-nonyl- (9CI) (CA INDEX NAME)



L27 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:760899 CAPLUS
DN 134:231611
TI Effects of schinifoline on cytoskeleton of experimental hepatoma in rats observed by whole mount cell transmission electron microscopy
AU Bai, Jinwen; Zhang, Ying; Yang, Meijuan; et al.
CS Beijing University of Traditional Chineses Medicine, Beijing, 100029, Peop. Rep. China
SO Beijing Zhongyiyao Daxue Xuebao (2000), 23(4), 27-29
CODEN: BZDXF5; ISSN: 1006-2157
PB Beijing Zhongyiyao Daxue Xuebao Bianjibu
DT Journal
LA Chinese
AB Whole mount cell TEM combined with selective extn. method was adopted to study the effect of schinifoline on hepatocellular cytoskeleton of exptl. hepatoma. It was shown that the filaments of the cytoskeletons of the transformed cells induced by DEN were obviously damaged, depolymd. and aggregated. After the treatment with schinifoline, the cytoskeletal system of the transformed cells recovered apparently. So schinifoline can be used to treat on the exptl. liver cancer cells in rat by influencing cytoskeleton.
IT 80554-58-1, Schinifoline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of schinifoline on cytoskeleton of exptl. hepatoma in rats
obsd. by whole mount cell transmission electron microscopy)
RN 80554-58-1 CAPLUS
CN 4 (1H)-Quinolinone, 2-heptyl-1-methyl- (9CI) (CA INDEX NAME)

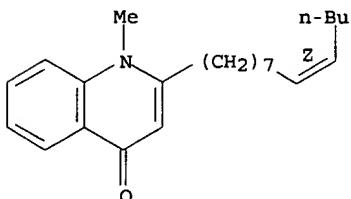


09945325



L27 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:601532 CAPLUS
DN 133:275963
TI Cyclic adenosine monophosphate inhibits quinolone alkaloid evocarpine-induced apoptosis via activation of protein kinase A in human leukaemic HL-60 cells
AU Kim, Na-Young; Pae, Hyun-Ock; Kang, Tai-Hyun; Kim, Youn-Chul; Lee, Ho-Sub; Chung, Hun-Taeg
CS Department of Microbiology and Immunology, Wonkwang University Medical School and Medicinal Resources, Research Center of Wonkwang University, College of Pharmacy, Wonkwang University, Chonbuk, 570-749, S. Korea
SO Pharmacology & Toxicology (Copenhagen) (2000), 87(1), 1-5
CODEN: PHTOEH; ISSN: 0901-9928
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB Evocarpine, an isoquinolone alkaloid isolated from the fruit of *Evodia rutaecarpa*, was found to induce apoptotic cell death in promyelocytic leukemia HL-60 cells in dose- and time-dependent manners. The authors investigated the involvement of protein kinase A during the evocarpine-induced apoptotic cell death. Evocarpine-induced apoptosis was markedly inhibited by treatment of the cells with dibutyryl-cAMP. Similar results were obtained with other commonly used cAMP analogs, chlorophenylthio-cAMP and the intracellular cAMP-elevating agent, forskolin. In contrast, pretreatment of HL-60 cells with KT5720, an inhibitor of cAMP-dependent protein kinase A, abrogated the protective effects of cAMP analogs and forskolin on evocarpine-induced apoptosis. These findings suggest that cAMP-dependent activation of protein kinase A plays a crucial role in protecting HL-60 cells from the evocarpine-induced apoptotic cell death.
IT 15266-38-3, Evocarpine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cyclic adenosine monophosphate inhibits quinolone alkaloid evocarpine-induced apoptosis via activation of protein kinase A in human leukemic HL-60 cells)
RN 15266-38-3 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-(8Z)-8-tridecenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

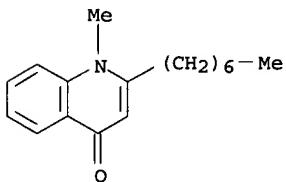


RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:438378 CAPLUS
DN 133:275839
TI Molecular modeling and activities prediction on schinifoline
AU Zhou, Yuxin; Du, Shushan; Qiao, Yanjing; Wei, Luxue
CS Beijing University of Traditional Chinese Medicine, Beijing, 100029, Peop. Rep. China
SO Beijing Zhongyiyao Daxue Xuebao (2000), 23(2), 21-22
CODEN: BZDXF5; ISSN: 1006-2157
PB Beijing Zhongyiyao Daxue Xuebao Bianjibu
DT Journal

09945325

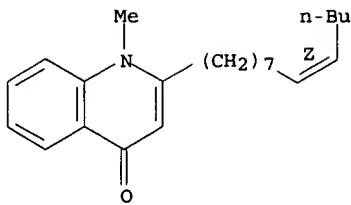
LA Chinese
AB The 3D-Conformations of schinifoline which was isolated from Zanthoxylum schinifolium Sied et Zucc were obtained via Mol. Modeling, and the optimum conformation was identified as b-conformation. The NOESY effects were discussed on the basis of space factors. Applying the method of Knowledge Discovery in Database (KDD) and searching in DNP and MDDR3D with KDD, schinifoline also showed other activities, such as anorexic activity, antibacterial action, 5-lipoxygenase inhibition and antiallergic effect were showed as well.
IT 80554-58-1, Schinifoline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mol. modeling and activities prediction on schinifoline)
RN 80554-58-1 CAPLUS
CN 4(1H)-Quinolinone, 2-heptyl-1-methyl- (9CI) (CA INDEX NAME)



L27 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:172144 CAPLUS
DN 132:319673
TI Highly selective antibacterial activity of novel alkyl quinolone alkaloids from a Chinese herbal medicine, Gosyuyu (Wu-Chu-Yu), against Helicobacter pylori in vitro
AU Hamasaki, Norio; Ishii, Eiji; Tominaga, Kazunari; Tezuka, Yasuhiro; Nagaoka, Takema; Kadota, Shigetoshi; Kuroki, Tetsuo; Yano, Ikuya
CS Department of Bacteriology and Third Department of Internal Medicine, Osaka City University Medical School, Osaka, Osaka, 545-8585, Japan
SO Microbiology and Immunology (2000), 44(1), 9-15
CODEN: MIIMDV; ISSN: 0385-5600
PB Center for Academic Publications Japan
DT Journal
LA English
AB To elucidate the antibacterial activity of Gosyuyu, the crude ext. from the fruit of *Evodia rutaecarpa*, a Chinese herbal medicine, has been fractionated chromatog., and each fraction was assayed for antibacterial activity against *Helicobacter pylori* in vitro. A single spot having marked antibacterial activity against *H. pylori* was obtained and the chem. structure was analyzed. The isolated compd. was revealed to be a novel alkyl quinolone alkaloid based on the solv., IR spectra, NMR anal. and mass spectrometric data after purifn. by TLC on silica. We compared the antimicrobial activity of this compd. with that of other antimicrobial agents and examd. the susceptibility of various intestinal pathogens. The new quinolone compds. obtained from Gosyuyu exts. were found to be a mixt. of two quinolone alkaloids, 1-methyl-2-[(Z)-8-tridecenyl]-4-(1H)-quinolone and 1-methyl-2-[(Z)-7-tridecenyl]-4-(1H)-quinolone (MW: 339), reported previously. The min. inhibitory concn. (MIC) of these compds. against ref. strains and clin. isolated *H. pylori* strains were less than 0.05 .mu.g/mL, which was similar to the MIC of amoxicillin and clarithromycin that are used worldwide for the eradication of *H. pylori*, clin. Furthermore, the antimicrobial activity of these compds. was highly selective against *H. pylori* and almost inactive against other intestinal pathogens. The above results showed that these alkyl Me quinolone (AM quinolones) alkaloids were useful for the eradication of *H. pylori* without affecting other intestinal flora.
IT 15266-38-3P 182056-19-5P
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(highly selective antibacterial activity of novel alkyl quinolone alkaloids from the Chinese herbal medicine Gosyuyu (Wu-Chu-Yu) against *Helicobacter pylori* in vitro)
RN 15266-38-3 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-(8Z)-8-tridecenyl- (9CI) (CA INDEX NAME)

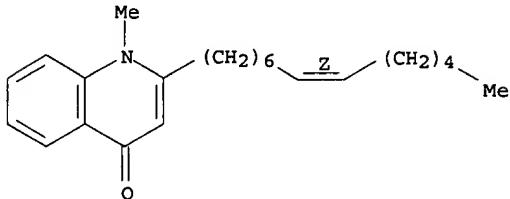
Double bond geometry as shown.

09945325



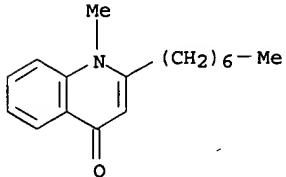
RN 182056-19-5 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-(7Z)-7-tridecenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:67382 CAPLUS
DN 132:342910
TI Flow cytometric analysis of the schinifoline inhibition on rat hepatoma cell induced by DEN
AU Bai, Jinwen; Zhang, Ying; Wu, Jing
CS Beijing University of Traditional Chinese Medicine, Beijing, 100029, Peop. Rep. China
SO Beijing Zhongyiyao Daxue Xuebao (1999), 22(6), 34-35
CODEN: BZDXF5; ISSN: 1006-2157
PB Beijing Zhongyiyao Daxue Xuebao Bianjibu
DT Journal
LA Chinese
AB In this paper, rat hepatoma was induced by diethylnitrosamine(DEN). The effects of schinifoline on DNA synthesis in hepatoma cell was obsd. by means of Flow Cytometry. It was showed that schinifoline could help to relieve the cell's quantity on S phase and increase it during G1 phase to S phase. So, schinifoline can treat exptl. hepatocarcinogenesis by inhibiting hepatoma cell's DNA synthesis and preventing the cytodiaeeresis.
IT 80554-58-1, Schinifoline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(flow cytometric anal. of the schinifoline inhibition on rat hepatoma cell induced by DEN)
RN 80554-58-1 CAPLUS
CN 4(1H)-Quinolinone, 2-heptyl-1-methyl- (9CI) (CA INDEX NAME)

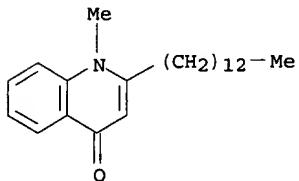


11 21 91 121 141
20 39 102 (b) ?
102 (a) ?

L27 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1999:43722 CAPLUS
DN 130:200809
TI Quinoline alkaloids from the fruits of *Evodia officinalis*
AU Shin, Hyen-Kil; Do, Jae-Chul; Son, Jong-Keun; Lee, Chong-Soon; Lee, Chul-Hyun; Cheong, Chae-Joon
CS College Pharmacy, Yeungnam University, Gyongsan, 712, S. Korea

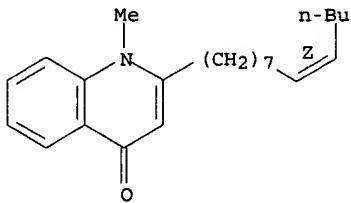
09945325

SO Planta Medica (1998), 64(8), 764-765
CODEN: PLMEA; ISSN: 0032-0943
PB Georg Thieme Verlag
DT Journal
LA English
AB A new quinoline deriv., 2-hydroxy-4-methoxy-3-(3'-methyl-2'-butenyl)-quinoline and 5 known quinoline alkaloids were isolated from the fruits of Evodia. The structure of 2-hydroxy-4-methoxy-3-(3'-methyl-2'-butenyl)-quinoline was detd. by spectroscopic methods.
IT 15266-35-0P, Dihydroevocarpine 15266-38-3P, Evocarpine
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(quinoline alkaloids from fruits of Evodia officinalis)
RN 15266-35-0 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-tridecyl- (9CI) (CA INDEX NAME)



RN 15266-38-3 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-(8Z)-8-trideceny- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1999:30499 CAPLUS
DN 130:261473
TI A trial of searching for bioactive compounds from traditional Oriental medicine
AU Saito, K.; Kano, Y.
CS Department of Kampo Medicinal Science, Hokkaido College of Pharmacy, Otaru, 047-02, Japan
SO International Congress Series (1998), 1157(Towards Natural Medicine Research in the 21st Century), 173-184
CODEN: EXMDA4; ISSN: 0531-5131
PB Elsevier Science B.V.
DT Journal
LA English
AB We have succeeded in using the following method in the identification of active components of traditional Oriental medicines. This new method differs from general others by the procedure described below: A lot of Oriental medicine have been used for long time as a crude drug taken orally. Therefore, evaluation of the compds. from crude drugs and screening bioactive compds. should be done following oral administration. In order for pharmacol. effects to appear, active components have to be absorbed into body. Thus, first we have to identify the heterogeneous compds. in blood, bile and urine of the exptl. animals that have been orally administrated water ext. of crude drugs, and secondly, these compds. found in the blood should be pharmacol. and biopharmaceutically exmd. In this report, studies of the active components by this new efficient method will be discussed about some Oriental medicines such as the roots of *Polygala tenuifolia* Will (Onji), the rhizome of *Atractylodes japonica* KOIZ. et KITAM. (Byakujutsu), the fruits of *Evodia rutaecarpa* BENTH. (Goshuyu), the root bark of *Morus alba* L. (Souhakuhi) and the seeds of *Zizyphus spinosa* Hu (Sanshonin).
IT 15266-38-3P, Evocarpine

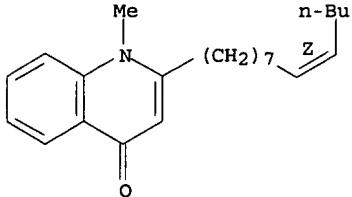
09945325

RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(searching for bioactive compds. from traditional Oriental medicine)

RN 15266-38-3 CAPLUS

CN 4(1H)-Quinolinone, 1-methyl-2-(8Z)-8-tridecenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1998:306474 CAPLUS

DN 129:90140

TI Inhibition of angiotensin II receptor binding by quinolone alkaloids from *Evodia rutaecarpa*

AU Lee, Hyun Sun; Oh, Won Keun; Choi, Hee Cheol; Lee, Jun Won; Kang, Dae Ook; Park, Chan Sun; Mheen, Tae-Ick; Ahn, Jong Seog

CS Korea Research Institute of Bioscience and Biotechnology (KRIBB), Taejon, 305-600, S. Korea

SO Phytotherapy Research (1998), 12(3), 212-214

CODEN: PHYREH; ISSN: 0951-418X

PB John Wiley & Sons Ltd.

DT Journal

LA English

AB A biol. monitored fractionation of methanol exts. of the fruit of *Evodia rutaecarpa* led to the isolation of quinolone alkaloids, evocarpin (1), 1-methyl-2-[(4Z,7Z)-4,7-tridecadienyl]-4(1H)-quinolone (2) and 1-methyl-2-[(6Z,9Z)-6,9-pentadecadienyl]-4(1H)-quinolone (3) as blockers of angiotensin II receptor binding with IC₅₀ values of 43.4 .mu.M, 34.1 .mu.M and 48.2 .mu.M, resp.

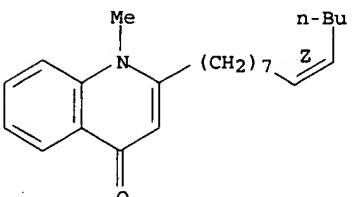
IT 15266-38-3 120693-52-9 120693-53-0

RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(inhibition of angiotensin II receptor binding by quinolone alkaloids from *Evodia rutaecarpa*)

RN 15266-38-3 CAPLUS

CN 4(1H)-Quinolinone, 1-methyl-2-(8Z)-8-tridecenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

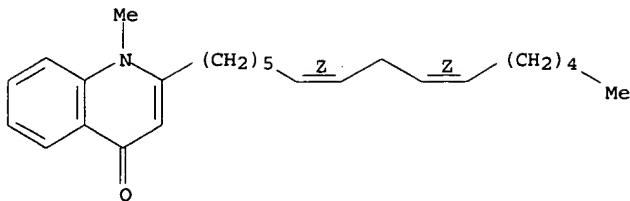


RN 120693-52-9 CAPLUS

CN 4(1H)-Quinolinone, 1-methyl-2-(6Z,9Z)-6,9-pentadecadienyl- (9CI) (CA INDEX NAME)

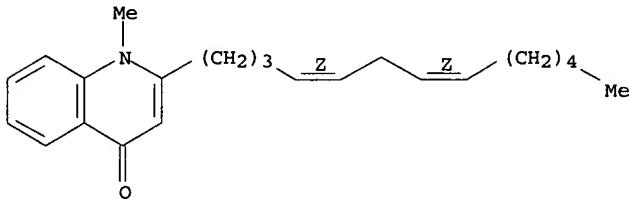
Double bond geometry as shown.

09945325



RN 120693-53-0 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-(4Z,7Z)-4,7-tridecadienyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L27 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1998:146158 CAPLUS

DN 128:268003

TI New quinolone compounds from *Pseudonocardia* sp. with selective and potent anti-*Helicobacter pylori* activity: taxonomy of producing strain, fermentation, isolation, structural elucidation and biological activities

AU Dekker, Koen A.; Inagaki, Taisuke; Gootz, Thomas D.; Huang, Liang H.; Kojima, Yasuhiro; Kohlbrenner, William E.; Matsunaga, Yasue; McGuirk, Paul R.; Nomura, Etsuko; Sakakibara, Tatsuo; Sakemi, Shinichi; Suzuki, Yumiko; Yamauchi, Yuji; Kojima, Nakao

CS Central Research Division, Pfizer Pharmaceuticals Inc., Aichi, 470-23, Japan

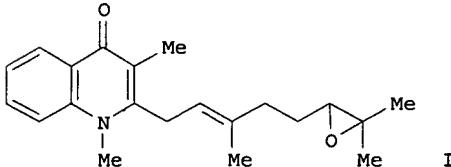
SO Journal of Antibiotics (1998), 51(2), 145-152
CODEN: JANTAJ; ISSN: 0021-8820

PB Japan Antibiotics Research Association

DT Journal

LA English

GI



AB Eight novel quinolones with anti-*Helicobacter pylori* activity were isolated from the actinomycete *Pseudonocardia* sp. CL38489. The quinolones were very potent against *H. pylori* with MICs up to 0.1 ng/mL. The most potent activity was obtained with the epoxy deriv. CJ-13,564 (I); the least active quinolone was the hydroxy deriv. CJ-13,567. The quinolones appear to be specific for *H. pylori*, since they did not show antimicrobial activity when tested against a panel of other microorganisms.

IT 189372-51-8P, CJ 13565 189372-53-0P, CJ 13566

189372-55-2P, CJ 13567

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(new quinolone compds. from *Pseudonocardia* sp. with selective and potent anti-*Helicobacter pylori* activity)

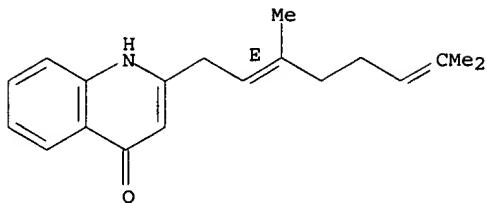
RN 189372-51-8 CAPLUS

CN 4(1H)-Quinolinone, 2-[(2E)-3,7-dimethyl-2,6-octadienyl]- (9CI) (CA INDEX NAME)

09945325

NAME)

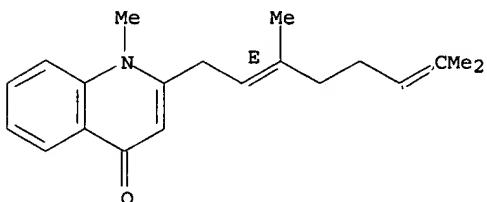
Double bond geometry as shown.



RN 189372-53-0 CAPLUS

CN 4(1H)-Quinolinone, 2-[(2E)-3,7-dimethyl-2,6-octadienyl]-1-methyl- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



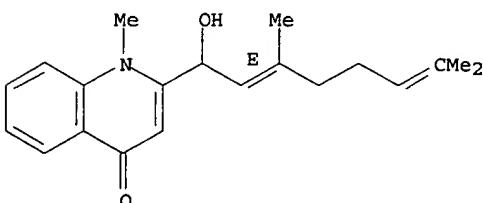
RN 189372-55-2 CAPLUS

CN 4(1H)-Quinolinone, 2-[(2E)-1-hydroxy-3,7-dimethyl-2,6-octadienyl]-1-methyl-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

Double bond geometry as shown.

Currently available stereo shown.



L27 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:123397 CAPLUS

DN 126:242939

TI Determination of the alkaloids in coptis-evodia herb couple by capillary electrophoresis

AU Lee, Ming-Chung; Sheu, Shuenn-Jyi

CS Department of Chemistry, National Taiwan Normal University, Taipei, Taiwan

SO Journal of Liquid Chromatography & Related Technologies (1997), 20(1), 63-78

CODEN: JLCTFC; ISSN: 1082-6076

PB Dekker

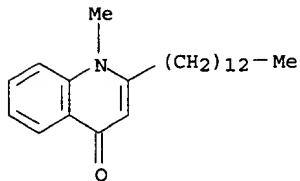
DT Journal

LA English

AB A method combining the techniques of micellar electrokinetic capillary chromatog. (MECC) and capillary zone electrophoresis (CZE) was developed to assay 17 alkaloids in coptis-evodia herb couple. The MECC method, based on SDS, was used to analyze 3 indolequinazoline alkaloids and 6 quinolone alkaloids in evodia within 30 min, and a CZE technique was used to det. 8 quaternary alkaloids (dehydroevodiamine in evodia, and 7 protoberberine alkaloids in coptis) within 25 min. The recovery efficiencies were 96.68-103.19% in MECC and 99.65-103.28% in CZE, with a relative std. deviation of 1.67-4.00% for MECC and 2.33-4.38% for CZE. The calibration curves exhibited good linearity over one order of magnitude of concn., and their min. detectable concns. were approx. 15.78-47.33 .mu.g/mL using a 0.75-.mu.m inner diam. column. Contents of the 17 alkaloids in a methanol-water crude ext. of coptis-evodia herb

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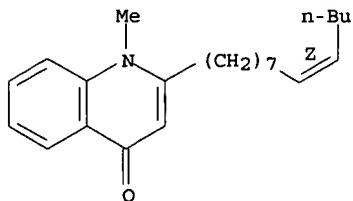
couple could easily be detd. by this method.
IT 15266-35-0, Dihydroevocarpine 15266-38-3, Evocarpine
59443-02-6, 1-Methyl-2-undecyl-4-(1H)-quinolone 68353-24-2
120693-49-4 120693-52-9
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical
study); BIOL (Biological study); USES (Uses)
(alkaloids detn. in coptis-evodia herb couple by capillary
electrophoresis)
RN 15266-35-0 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-tridecyl- (9CI) (CA INDEX NAME)



1, 14, 1, 20-39

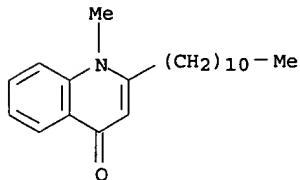
RN 15266-38-3 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-(8Z)-8-trideceny- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

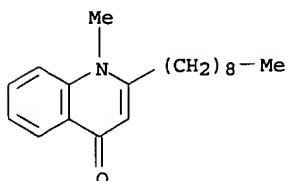


1, 14, 15, 20-39

RN 59443-02-6 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-undecyl- (9CI) (CA INDEX NAME)



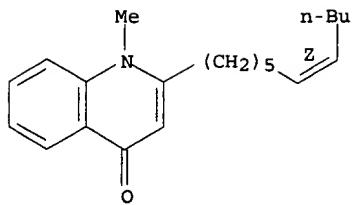
RN 68353-24-2 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-nonyl- (9CI) (CA INDEX NAME)



RN 120693-49-4 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-(6Z)-6-undecenyl- (9CI) (CA INDEX NAME)

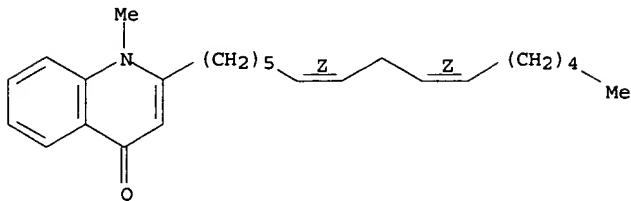
Double bond geometry as shown.

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RN 120693-52-9 CAPLUS
CN 4(1H)-Quinolinone, 1-methyl-2-(6Z,9Z)-6,9-pentadecadienyl- (9CI) (CA
INDEX NAME)

Double bond geometry as shown.



09945325

> d his

(FILE 'HOME' ENTERED AT 16:35:47 ON 19 AUG 2002)

FILE 'REGISTRY' ENTERED AT 16:35:55 ON 19 AUG 2002

L1 STRUCTURE uploaded
L2 17 S L1
L3 326 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:38:35 ON 19 AUG 2002

L4 198 S L3

FILE 'STNGUIDE' ENTERED AT 16:38:54 ON 19 AUG 2002

FILE 'REGISTRY' ENTERED AT 16:41:54 ON 19 AUG 2002

L5 STRUCTURE uploaded
L6 8 S L5 SUB=L3 SAMPLE
L7 117 S L5 SUB=L3 FULL

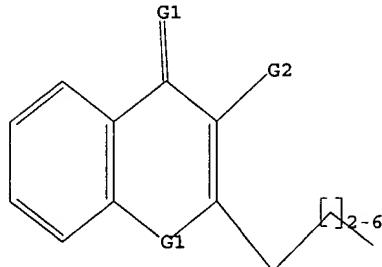
FILE 'CAPLUS' ENTERED AT 16:44:19 ON 19 AUG 2002

L8 99 S L7
L9 10 S L8 AND PATENT/DT
L10 89 S L8 NOT L9
L11 87 S L10 NOT BUTYL
L12 3 S 135015-64-4/RN
L13 87 S L11 NOT L12
L14 9 S L13 AND HEPTYL
L15 23 S L2
L16 23 S L15 NOT L9
L17 23 S L16 NOT L14
L18 5 S L17 AND PATENT/DT
L19 18 S L17 NOT L18
L20 0 S L19 AND THIOPYRAN?
L21 1 S L19 AND BENZOTHIOPYRAN?

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 O,S,N

G2 H,O,S,N

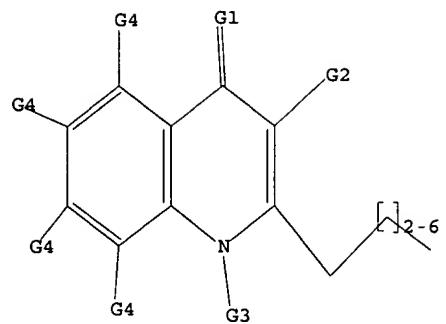
Structure attributes must be viewed using STN Express query preparation.

=> d 15

L5 HAS NO ANSWERS

L5 STR

09945325



G1 O, S, N

G2 H, O, S, N

G3 H, O, S, Me, Et, n-Pr, i-Pr, n-Bu

G4 C, H, O, S, N, Cl, Br, F, I

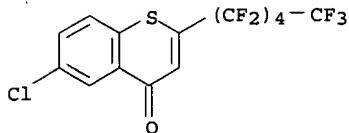
Structure attributes must be viewed using STN Express query preparation.

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09945325

=> d bib abs hitstr

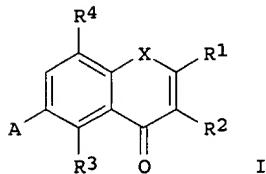
L21 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 1995:700822 CAPLUS
DN 123:339635
TI A new synthetic route to fluorine-containing thiochromones
AU Huang, Wei-Yuan; Liu, Yan-Song
CS Shanghai Inst. Org. Chem., Chinese Academy Sci., Shanghai, 200032, Peop.
Rep. China
SO Heteroat. Chem. (1995), 6(3), 287-91
CODEN: HETCE8; ISSN: 1042-7163
DT Journal
LA English
OS CASREACT 123:339635
AB The Michael-addn. of polyfluoroalkenoates with thiophenols in acetonitrile
in the presence of NaHCO₃ gave the corresponding addn. products, which
were further treated with polyphosphoric acid (PPA) to give a series of
new fluorinated thiochromones in good yields. The Michael condensation of
6-chloro-3,4,4,5,5,6,6-heptafluoro-2-hexenoic acid Et ester with
benzenethiol gave (Z)-6-chloro-4,4,5,5,6,6-hexafluoro-3-(phenylthio)-2-
hexenoic acid Et ester. The cyclocondensation of this ester gave
2-(3-chloro-1,1,2,2,3,3-hexafluoropropyl)-4H-1-benzothiopyran
-4-one.
IT 170502-41-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of (fluoroalkyl)thiochromones from fluoroalkenoates and
benzenethiols)
RN 170502-41-7 CAPLUS
CN 4H-1-Benzothiopyran-4-one, 6-chloro-2-(undecafluoropentyl)- (9CI) (CA
INDEX NAME)



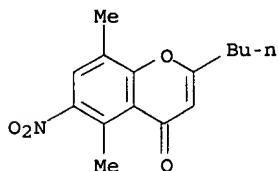
09945325

L18 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 1999:271348 CAPLUS
DN 130:281991
TI Preparation of chromone compounds as intermediates for fungicides and herbicides
IN Takahashi, Nobuyoshi; Gotoda, Satoshi; Nakagawa, Hirofumi; Murakami, Mitsuyuki
PA Otsuka Chemical Co., Ltd., Japan
SO PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9919318	A1	19990422	WO 1998-JP4524	19981007
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IS, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	JP 11116564	A2	19990427	JP 1997-277312	19971009
	AU 9894577	A1	19990503	AU 1998-94577	19981007
	US 6303583	B1	20011016	US 1999-381287	19990921
PRAI	JP 1997-277312	A	19971009		
	WO 1998-JP4524	W	19981007		
OS	MARPAT	130:281991			
GI					



AB Title compds. I (R1 = H, alkyl, haloalkyl, alkoxyalkyl, alkoxy carbonyl, cyano, alkoxy carbonyl amino, alkylthio, Ph, substituted Ph; R2 = H, alkyl; R3 = halo, alkyl, alkoxy, cyano; R4 = H, halo, alkyl; A = NO₂, NH₂, NCO, NCS, NHCONR₅NH₂, NHCSNR₅NH₂; R5 = H, alkyl, benzyl, substituted benzyl, alkenyl; X = O, S), useful as intermediates for fungicides and herbicides, were prep'd. For example, nitration of 2,5,8-trimethylchromone with HNO₃/H₂SO₄ gave 78% 2,5,8-trimethyl-6-nitrochromone, redn. of which with Fe/HCl gave 92% 6-amino-2,5,8-trimethylchromone.
IT 222611-49-6P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of chromone compds. as intermediates for fungicides and herbicides)
RN 222611-49-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-butyl-5,8-dimethyl-6-nitro- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 1999:81277 CAPLUS
DN 130:200747
TI Skin-lightening cosmetics

09945325

IN Abe, Akihito; Takahashi, Akihiko; Kawakami, Kyoko

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

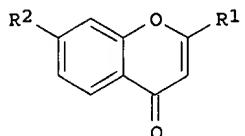
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11029430	A2	19990202	JP 1997-346216	19971216
PRAI	JP 1997-124082		19970514		
OS	MARPAT 130:200747				
GI					



I

AB Skin-lightening cosmetics comprise chromone derivs. (I) [R1 = C1-16 alkyl; R2 = H, ect.] and exts. of plants such as Matricaria chamomilla, tea leaf and licorice. A pack contained dipropylene glycol 3.0, ethoxylated hardened castor oil 5.0, isotridecyl isononanoate 3.0, butylparaben 0.3, tocopherol acetate 0.2, ethylparaben 0.1, perfumes q.s., sodium bisulfite 0.01, polyvinyl alc. [90% sapon.] 13.0, ethanol 10.0, Matricaria chamomilla 0.5, 1-[2-hydroxyethylamino]-3[12-hydroxystearyoxy]-2-propanol 5.0, 2-heptylchromone 1.0, L-ascorbic phosphate ester magnesium salt 3.0 and ion-exchanged water to 100 %.

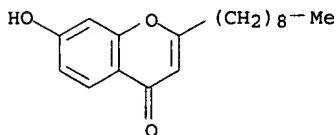
IT 171269-71-9

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(skin-lightening cosmetics)

RN 171269-71-9 CAPLUS

CN 4H-1-Benzopyran-4-one, 7-hydroxy-2-nonyl- (9CI) (CA INDEX NAME)



L18 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS

AN 1998:527328 CAPLUS

DN 129:148985

TI Preparation of chromone derivatives as fungicidal and herbicidal agents

IN Takahashi, Nobuyoshi; Gotoda, Satoshi; Nakagawa, Hirofumi; Murakami, Mitsuyuki; Komura, Tomozo; Akasaka, Tatsuya; Yanase, Daisuke

PA Otsuka Kagaku Kabushiki Kaisha, Japan

SO PCT Int. Appl., 59 pp.

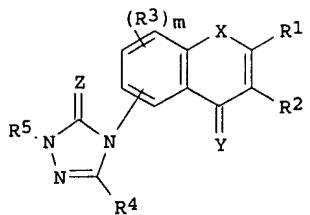
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9832752	A1	19980730	WO 1998-JP309	19980127
	W: AU, BG, BR, CA, CN, CZ, HU, KR, LK, LT, NO, NZ, PL, RO, SK, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 10273487	A2	19981013	JP 1997-298313	19971030
	AU 9855776	A1	19980818	AU 1998-55776	19980127
PRAI	JP 1997-13670		19970128		
	JP 1997-298313		19971030		
	WO 1998-JP309		19980127		
OS	MARPAT 129:148985				
GI					



I

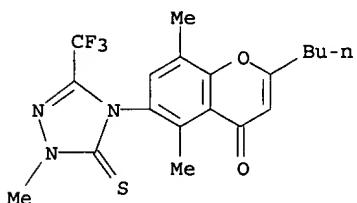
AB The title compds. (I; X, Y, Z = O, S; R1 = H, C1-6 alkyl, etc.; R2 = H, C1-6 alkyl, C3-8 cycloalkyl; R3 = H, halo, etc.; m = 1-3; R4 = H, C1-6 alkyl or haloalkyl, etc.; R5 = H, C1-6 alkyl, C3-8 cycloalkyl, etc.) are prep'd. I are useful as fungicides and herbicides. Thus, 2-n-butyl-4-(2,5,8-trimethylchromon-6-yl)thiosemicarbazide was reacted with MeC(OEt)3 to give 70% I (X = Y = O, Z = S, R1 = R4 = Me, R2 = H, R3 = 5,8-Me2, R5 = n-Bu), which at 100 ppm showed > 90% fungicidal effect for Pyricularia oryzae.

IT 207281-87-6P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of chromone derivs. as fungicidal and herbicidal agents)

RN 207281-87-6 CAPLUS

CN 4H-1-Benzopyran-4-one, 2-butyl-6-[1,5-dihydro-1-methyl-5-thioxo-3-(trifluoromethyl)-4H-1,2,4-triazol-4-yl]-5,8-dimethyl- (9CI) (CA INDEX NAME)



L18 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS

AN 1995:975353 CAPLUS

DN 124:8620

TI Preparation of chromones as melanin biosynthesis inhibitors

IN Kitayama, Takashi; Ichinose, Susumu; Hori, Takashi; Nishizawa, Yoshinori; Kimura, Mitsutoshi; Yada, Yukihiro; Imokawa, Genji

PA Kao Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF

DT Patent

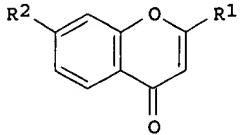
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07188208	A2	19950725	JP 1993-332342	19931227
	JP 3071990	B2	20000731		

OS MARPAT 124:8620

GI



I

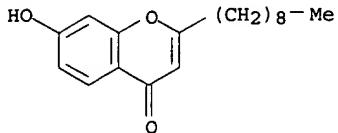
AB The title compds. I [R1 = alkyl; R2 = H, hydroxy, etc.] are prep'd. 2-Butylchromone (II) was prep'd. from 2-hydroxyacetophenone and Et valerate. In a test using human volunteers, II prevented the skin from darkening due to UV B light. Cosmetic creams contg. I were prep'd.

IT 171269-71-9P

09945325

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of chromones as melanin biosynthesis inhibitors)

RN 171269-71-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-2-nonyl- (9CI) (CA INDEX NAME)



L18 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS

AN 1985:45915 CAPLUS

DN 102:45915

TI Chromone- and thiochromone-substituted 1,4-dihydropyridine lactones and their use in pharmaceuticals

IN Goldmann, Siegfried; Bossert, Friedrich; Schramm, Matthias; Thomas, Guenter; Gross, Rainer

PA Bayer A.-G. , Fed. Rep. Ger.

SO Ger. Offen., 15 pp.

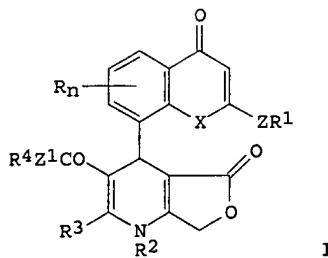
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3311003	A1	19840927	DE 1983-3311003	19830325
	DK 8401449	A	19840926	DK 1984-1449	19840229
	DK 158950	B	19900806		
	DK 158950	C	19901231		
	EP 123095	A2	19841031	EP 1984-102659	19840312
	EP 123095	A3	19861203		
	EP 123095	B1	19881026		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	AT 38229	E	19881115	AT 1984-102659	19840312
	NO 8400950	A	19840926	NO 1984-950	19840313
	NO 160659	B	19890206		
	NO 160659	C	19890516		
	US 4555512	A	19851126	US 1984-589614	19840314
	ES 530800	A1	19841101	ES 1984-530800	19840321
	FI 8401153	A	19840926	FI 1984-1153	19840322
	FI 81100	B	19900531		
	FI 81100	C	19900910		
	IL 71314	A1	19881230	IL 1984-71314	19840322
	ZA 8402166	A	19841031	ZA 1984-2166	19840323
	HU 33808	O	19841228	HU 1984-1175	19840323
	HU 189849	B	19860828		
	CA 1211109	A1	19860909	CA 1984-450361	19840323
	JP 59193887	A2	19841102	JP 1984-57202	19840324
	JP 03016955	B4	19910306		
	AU 8426099	A1	19840927	AU 1984-26099	19840326
	AU 564838	B2	19870827		
	ES 552277	A1	19870901	ES 1986-552277	19860221
	ES 552278	A1	19870901	ES 1986-552278	19860221
	ES 552279	A1	19870901	ES 1986-552279	19860221
	ES 552280	A1	19870901	ES 1986-552280	19860221
PRAI	DE 1983-3311003		19830325		
	EP 1984-102659		19840312		
OS	CASREACT		102:45915		
GI					

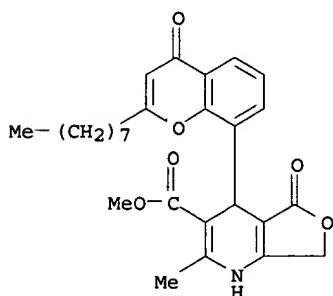


AB Cardiotonic and hypoglycemic (no data) title compds. [I; R = H, halo; R1 = aliph., alkoxy carbonyl, (un)substituted arom., heteroarom.; R2 = H, (un)substituted alkyl; R3 = H, (un)substituted alkyl, alkenyl, cycloalkyl, cycloalkenyl, optionally interrupted by O, S, SO2, R5N; R4 = (un)substituted straight- or branched-chain or cyclic hydrocarbon; R5 = H, alkyl; Z = bond, alkylene, alkenylene, optionally interrupted by O, S; Z1 = bond, O, S, R5N; n = 0-3] were prep'd. Thus, 4-oxo-2-phenyl-4H-thiochromene-8-carboxaldehyde was refluxed in EtOH with H2NCMe:CHCO2Et and ClCH2COCH2CO2Me to give I (R1 = Ph, R2 = H, R3 = Me, R4 = Et, Z = bond, Z1 = O, n = 0).

IT 94127-46-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 94127-46-5 CAPLUS

CN Furo[3,4-b]pyridine-3-carboxylic acid, 1,4,5,7-tetrahydro-2-methyl-4-(2-octyl-4-oxo-4H-1-benzopyran-8-yl)-5-oxo-, methyl ester (9CI) (CA INDEX NAME)



09945325

L9 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2002:465817 CAPLUS

DN 137:33203

TI Substituted-4-quinolones

IN Pritchard, David Idris

PA The University of Nottingham, UK

SO PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

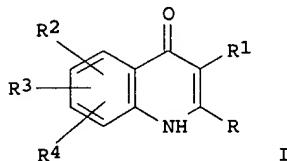
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2002047686	A1	20020620	WO 2001-GB5550	20011217	
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI GB 2000-30729 A 200001216

OS MARPAT 137:33203

GI

not in art



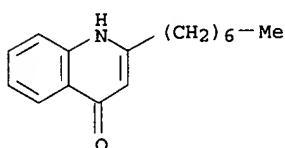
AB Substituted-4-quinolones I are claimed, wherein R is a straight or branched chain, satd. or ethylenically-unsatd. aliph. hydrocarbyl group contg. 1 to 18 C atoms which may optionally be substituted by one or more substituent groups selected from halo, 1-6C alkoxy, carboxy, 1-6C alkoxy carbonyl and NR5R6, wherein each of R5 and R6 is independently selected from H and 1-6C alkyl or R5 and R6 together with the N atom to which they are attached form a satd. heterocyclic group selected from piperidino, piperazino and morpholino; R1 is a group selected from H, -OH, halo, -CHO, -CO2H and CONHR7 wherein R7 is H or a 1-6C alkyl; each of R2, R3 and R4 is independently selected from H, -CH3, -OCH3 and halo; or a nontoxic pharmaceutically-acceptable salt thereof, use in the manuf. of a medicament for the treatment of a disease of a living animal body, including a human, which disease is responsive to the activity of an immunosuppressant. The preferred compd. of the formula I is 2-n-heptyl-3-hydroxy-4(1H)-quinolone.

IT 40522-46-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reactant for prepn. of 2-n-heptyl-3-hydroxy-4(1H)-quinolone as immunosuppressant)

RN 40522-46-1 CAPLUS

CN 4(1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)



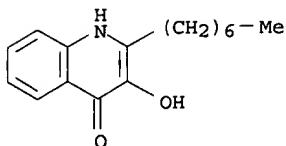
IT 108985-27-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-n-heptyl-3-hydroxy-4(1H)-quinolone as immunosuppressant)

RN 108985-27-9 CAPLUS

09945325

CN 4(1H)-Quinolinone, 2-heptyl-3-hydroxy- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2002:171860 CAPLUS

DN 136:215514

TI Novel autoinducer molecules and uses therefor

IN Pesci, Everett C.; Milbank, Jared B. J.; Pearson, James P.; Kende, Andrew S.; Greenberg, Everett Peter; Iglesias, Barbara H.

PA The University of Iowa Research Foundation, USA; University of Rochester; East Carolina University

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018342	A2	20020307	WO 2001-US27165	20010831
	WO 2002018342	A3	20020510		
		W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		

AU 2001086976 A5 20020313 AU 2001-86976 20010831

PRAI US 2000-229715P P 20000831

WO 2001-US27165 W 20010831

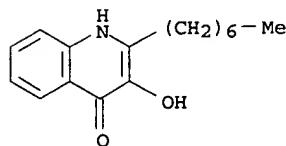
OS MARPAT 136:215514

AB Novel bacterial quinolone signal mols. and, more particularly, *Pseudomonas* quinolone signal ("PQS") mols., e.g., 2-heptyl-3-hydroxy-4-quinolone, and analogs and derivs. are described. Therapeutic compns. contg. the mols., and therapeutic methods, methods of for regulating gene expression, methods for identifying modulators of the autoinducer mols., and methods of modulating quorum sensing signaling in bacteria using the compds. of the invention are also described. Thus, 2-Heptyl-3-hydroxy-4-quinolone was isolated from culture broth of *Pseudomonas aeruginosa* PAO-JP2/pECP39.

IT 108985-27-9DP, 2-Heptyl-3-hydroxy-4-quinolone, and derivatives of
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(novel *Pseudomonas* autoinducer mols.)

RN 108985-27-9 CAPLUS

CN 4(1H)-Quinolinone, 2-heptyl-3-hydroxy- (9CI) (CA INDEX NAME)



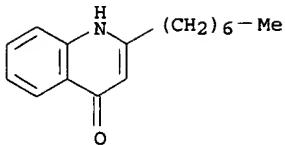
IT 40522-46-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(novel *Pseudomonas* autoinducer mols.)

RN 40522-46-1 CAPLUS

CN 4(1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)

This app

09945325



L9 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2000:766788 CAPLUS
DN 133:313611
TI Quinolone alkaloids for the inhibition of Helicobacter pylori
IN Ishii, Eiji; Yano, Ikuya; Tezuka, Yasuhiro; Nagaoka, Takema; Monden, Shigetoshi
PA Yamanouchi Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF

DT Patent

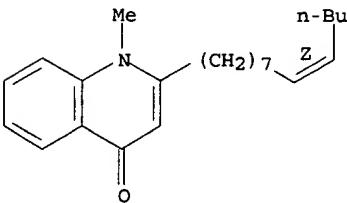
LA Japanese

FAN-CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000302682	A2	20001031	JP 1999-116553	19990423
AB	Disclosed are Helicobacter pylori inhibitors and remedies for gastritis, gastric ulcer, duodenum ulcer, and gastric cancers comprising 1-methyl-2-[(Z)-8-tridecenyl]-4-1(H)-quinolone (I) or 1-methyl-2-[(Z)-7-tridecenyl]-4-1(H)-quinolone (II). I and II were isolated from di-Et ether ext. of Evodia fruits and their antibacterial activities against H. pylori were obsd.				
IT	15266-38-3 182056-19-5 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (quinolone alkaloids for inhibition of Helicobacter pylori)				
RN	15266-38-3 CAPLUS				
CN	4 (1H)-Quinolinone, 1-methyl-2-(8Z)-8-tridecenyl- (9CI) (CA INDEX NAME)				

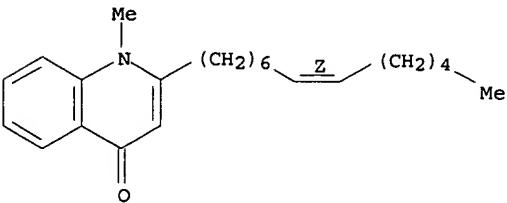
Double bond geometry as shown.

not prior art



RN 182056-19-5 CAPLUS
CN 4 (1H)-Quinolinone, 1-methyl-2-(7Z)-7-tridecenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L9 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS
AN 2000:697296 CAPLUS
DN 133:265710
TI 2-(2-Nonenyl)-4(1H)-quinolone derivative and bactericides against Helicobacter pylori containing them
IN Tanaka, Koichi; Watanabe, Masato; Komiya, Masayuki; Yamaguchi, Hiroshi; Amagase, Mitsuo; Sinwatoro, Pule Agsta; Sechiawan, Boen
PA Yamanouchi Pharmaceutical Co., Ltd., Japan; P. T. Karube Pharma
SO Jpn. Kokai Tokkyo Koho, 10 pp.

09945325

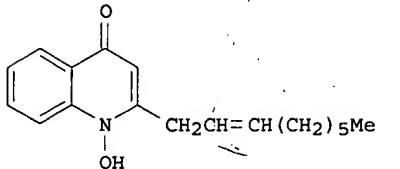
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000273086	A2	20001003	JP 1999-76817	19990319
GI					



I

AB The deriv. I or its salts is useful as a drug for treating infection with *H. pylori* and related diseases, e.g. gastric and duodenal ulcer, gastritis, duodenitis, gastric cancer, etc. Arthrobacter YL-02729 (FERM BP-6326) was cultured in a medium contg. glycerin, yeast ext., polypeptone, and Caco3 at 28.degree. for 48 h to give I called YM-176005. MIC of I against *H. pylori* was 0.013 .mu.g/mL.

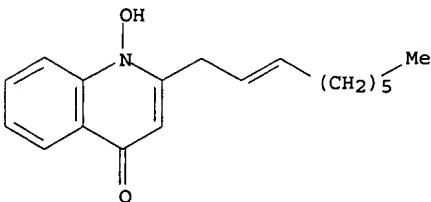
IT 298683-33-7P, YM 176005

RL: BAC (Biological activity or effector, except adverse); BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(manuf. of nonenylhydroxyquinolone as bactericide for *Helicobacter pylori*)

RN 298683-33-7 CAPLUS

CN 4 (1H)-Quinolinone, 1-hydroxy-2-(2-nonenyl)- (9CI) (CA INDEX NAME)

Double bond geometry unknown.
Currently available stereo shown.



L9 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1999:225614 CAPLUS

DN 130:278028

TI Harmless antifouling agents containing alkylquinolinones

IN Yoshikawa, Kazuhiro; Ajioka, Kiyoko; Mochida, Kenichi

PA Kaiyo Biotechnology Laboratory K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

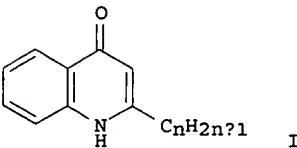
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11092307	A2	19990406	JP 1997-276476	19970924
OS	MARPAT	130:278028			
GI					



I

09945325

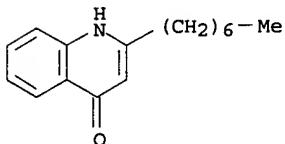
AB Title agents contain 2-alkyl-4-quinolinones I ($n = 0-12$) or 2-heptyl-4-quinolinone N-oxide. I ($n = 1$) prevented adhesion of barnacle cypris larvae onto a petri dish. No lethal effect was obsd.

IT 40522-46-1 109072-26-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(harmless antifouling agents contg. alkylquinolinones)

RN 40522-46-1 CAPLUS

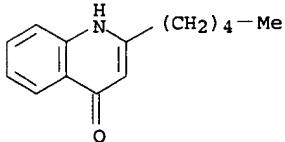
CN 4(1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)



Chemical structure 109072-26-6

RN 109072-26-6 CAPLUS

CN 4(1H)-Quinolinone, 2-pentyl- (9CI) (CA INDEX NAME)



L9 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1997:344527 CAPLUS

DN 126:316400

TI Quinolone compounds for the treatment of disorders caused by Helicobacter pylori

IN Dekker, Koenraad A.; Huang, Liang H.; Inagaki, Taisuke; Kojima, Nakao; Kojima, Yasuhiro; Yamauchi, Yuji

PA Pfizer Pharmaceuticals Inc., Japan; Pfizer Inc.; Dekker, Koenraad, A.; Huang, Liang, H.; Inagaki, Taisuke; Kojima, Nakao; Kojima, Yasuhiro; Yamauchi, Yuji

SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2

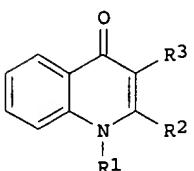
DT Patent

LA English

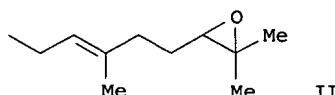
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9712868	A1	19970410	WO 1996-IB670	19960711
	W: CA, JP, MX, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 858450	A1	19980819	EP 1996-921014	19960711
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	JP 10511690	T2	19981110	JP 1996-502359	19960711
	US 5942619	A	19990824	US 1998-43374	19980424
PRAI	WO 1995-IB812		19950929		
	JP 1988-I	B9500812	19950929		
	WO 1995-JP812		19950929		
	WO 1996-IB670		19960711		

GI



I



II

09945325

AB This invention provides processes for producing quinolone compds. which comprise cultivating *Amycolata* sp. DERM BP-4785, and then isolating quinolone compds. from the fermn. broth. The compds. produced by these processes include compds. of formula (I) wherein R1 is H, R2 is ~~-CH2CH=C(Me)CH2CH2CH=CMe2~~ (II) and R3 is CH3; R1 is CH3 R2 is II and R3 is CH3; or R1 is CH3, R2 is III and R3 is CH3; and the like. The present invention also relates to a pharmaceutical compn. comprising the same, which is useful in the treatment of diseases, disorders, and adverse conditions caused by *H. pylori* and is particularly useful in the treatment of gastroduodenal disorders, diseases, and adverse conditions caused thereby.

IT 189372-51-8P, CJ 13565 189372-53-0P, CJ 13566

189372-55-2P, CJ 13567

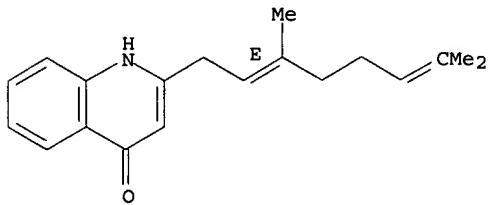
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(quinolone compds. from *Amycolata* for the treatment of disorders caused by *Helicobacter pylori*)

RN 189372-51-8 CAPLUS

CN 4(1H)-Quinolinone, 2-[(2E)-3,7-dimethyl-2,6-octadienyl]- (9CI) (CA INDEX NAME)

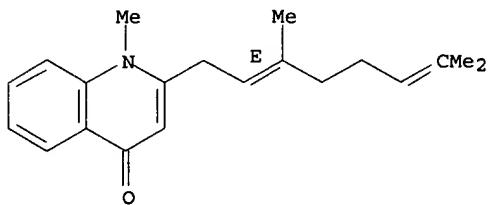
Double bond geometry as shown.



RN 189372-53-0 CAPLUS

CN 4(1H)-Quinolinone, 2-[(2E)-3,7-dimethyl-2,6-octadienyl]-1-methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



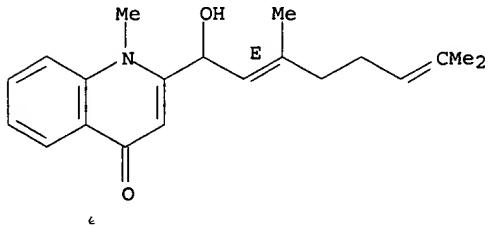
RN 189372-55-2 CAPLUS

CN 4(1H)-Quinolinone, 2-[(2E)-1-hydroxy-3,7-dimethyl-2,6-octadienyl]-1-methyl-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

Double bond geometry as shown.

Currently available stereo shown.



L9 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1993:22153 CAPLUS

DN 118:22153

TI Preparation of (4-quinolylmethyl)benzoates and analogs as drugs

IN Clemence, Francois; Fortin, Michel; Haesslein, Jean Luc

PA Roussel-UCLAF, Fr.

09945325

SO Eur. Pat. Appl., 88 pp.

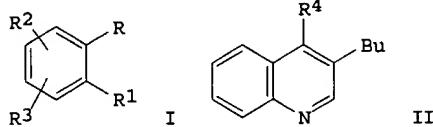
CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 498722	A1	19920812	EP 1992-400295	19920205
	EP 498722	B1	19970730		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
	FR 2672595	A1	19920814	FR 1991-1373	19910207
	FR 2672595	B1	19950519		
	FR 2680509	A1	19930226	FR 1991-10434	19910820
	FR 2680509	B1	19950728		
	JP 04338378	A2	19921125	JP 1992-47749	19920205
	AT 156120	E	19970815	AT 1992-400295	19920205
	ES 2104862	T3	19971016	ES 1992-400295	19920205
	CA 2060771	AA	19920808	CA 1992-2060771	19920206
	US 5324839	A	19940628	US 1992-832003	19920206
	US 5478938	A	19951226	US 1994-216035	19940322
PRAI	FR 1991-1373		19910207		
	FR 1991-10434		19910820		
	US 1992-832003		19920206		
OS	MARPAT 118.22153				
GI					



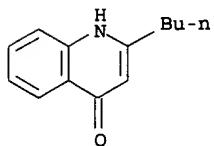
AB Title compds. [I; RR1 = Z1:Z2:Z3:Z4 wherein, e.g., 1 of Z1-Z4 = N, 1 of the remaining Z = (substituted)-CCH2Ph, and the others = N or (substituted)methine; R2,R3 = H, halo, alkyl, aryl, CONH2, etc.] were prepd. as cardiovascular agents, psychoanaleptics, etc. (no data). Thus, BuCH2CO2Et was condensed with (CO2Et)2 and the product condensed with PhNH2 to give PhNHC(CO2Et):CBuCO2Et which was cyclized and the product converted in 2 steps to quinoline II (R4=Cl). The latter was condensed with 4-(BrH2C)C6H4CN to give, after hydrolysis, II [R4 = CH2C6H4(CO2H)-4].

IT 135015-64-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of drugs)

RN 135015-64-4 CAPLUS

CN 4(1H)-Quinolinone, 2-butyl- (9CI) (CA INDEX NAME)



L9 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1993:22152 CAPLUS

DN 118:22152

TI Preparation of 1-[(carboxybiphenylyl)methyl]-1,4-dihydroquinolin-4-ones and analogs as drugs

IN Clemence, Francois; Fortin, Michel; Haesslein, Jean Luc

PA Roussel-UCLAF, Fr.

SO Eur. Pat. Appl., 163 pp.

CODEN: EPXXDW

DT Patent

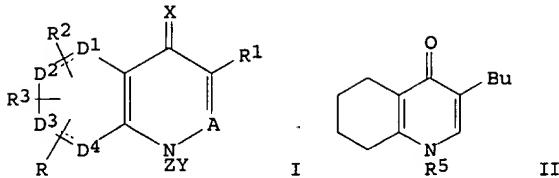
LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 498721	A1	19920812	EP 1992-400294	19920205
	EP 498721	B1	19991222		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				

09945325

FR 2672597	A1	19920814	FR 1991-1372	19910207
FR 2672597	B1	19950519		
FR 2680511	A1	19930226	FR 1991-10433	19910820
FR 2680511	B1	19950519		
FR 2684671	A1	19930611	FR 1991-14282	19911120
FR 2684671	B1	19950519		
IL 100555	A1	20000831	IL 1991-100555	19911230
ZA 9200577	A	19930331	ZA 1992-577	19920128
JP 04360872	A2	19921214	JP 1992-47594	19920204
AU 9210710	A1	19920820	AU 1992-10710	19920205
AT 187964	E	20000115	AT 1992-400294	19920205
ES 2141098	T3	20000316	ES 1992-400294	19920205
FI 9200504	A	19920808	FI 1992-504	19920206
HU 64524	A2	19940128	HU 1992-367	19920206
RU 2125047	C1	19990120	RU 1992-5010859	19920206
CA 2060843	AA	19920808	CA 1992-2060843	19920207
CN 1064076	A	19920902	CN 1992-100765	19920207
BR 9200432	A	19921013	BR 1992-432	19920207
PL 169672	B1	19960830	PL 1992-293414	19920207
AU 9521838	A1	19950914	AU 1995-21838	19950622
US 5985894	A	19991116	US 1997-964182	19971104
AU 9877433	A1	19981105	AU 1998-77433	19980722
PRAI	FR 1991-1372	A	19910207	
	FR 1991-10433	A	19910820	
	FR 1991-14282	A	19911120	
	US 1992-832030	B1	19920206	
	US 1994-196424	B1	19940215	
	AU 1995-21838	A3	19950622	
OS	MARPAT 118:22152			
GI				



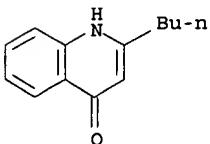
AB Title compds. [I; A = N, CR4; D1-D4 = N, CH, CH2; dashed lines = optional bonds; R, R2, R3 = H, (cyclo)alkyl, halo, aryl, etc.; R1, R4 = H, (cyclo)alkyl, alkenyl, acyl, cyano, etc.; X = O, S; Y = e.g. C6H4CO2H, carboxybiphenyl, etc.; Z = alkylene] were prepd. Thus, BuCH2CO2Et was condensed with (CO2Et)2 and the product condensed with PhNH2 to give PhNHC(CO2Et):CBuCO2Et which was cyclized and the product converted in 3 steps to hydroquinolone II (R5 = H). The latter was condensed with 4-(BrCH2)C6H4C6H4(CO2Me)-2 to give, after sapon., II (R5 = 2'-carboxybiphenylmethyl) which had ED50 of 1 mg/kg i.v. for antagonism of angiotensin II activity in vagotomized rats.

IT 135015-64-4P, 2-Butyl-4-(1H)-quinolone

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of drugs)

RN 135015-64-4 CAPLUS

CN 4(1H)-Quinolinone, 2-butyl- (9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1992:633870 CAPLUS

DN 117:233870

TI Preparation of 4-quinolone derivatives

IN Torii, Shigeru; Okumoto, Hiroshi

PA Otsuka Chemical Co., Ltd., Japan

09945325

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

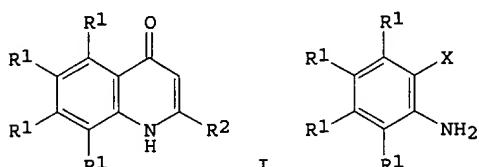
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 04164070	A2	19920609	JP 1990-289600	19901026
JP 2952706	B2	19990927		

OS CASREACT 117:233870; MARPAT 117:233870

GI



I

II

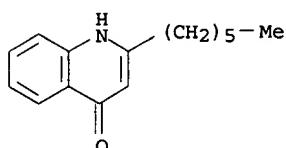
AB 4-Quinolone derivs. [I; R1 = H, alkyl, alkenyl, cycloalkyl, (protected) OH, NO₂, halo, etc.; R2 = H, alkyl, alkenyl, cycloalkyl, (protected) OH, NO₂, halo, cyano, NH₂, etc.] are prep'd. in high yields and purity by cyclocondensation of aniline derivs. II (X = halo) with R2C.tplbond.CH and CO over Pd catalysts. A soln. of o-IC₆H₄NH₂, PhC.tplbond.CH, and (Ph₃P)₂PdCl₂ in Et₂NH was heated at 120.degree. and 20 kg/cm² CO to give 90% I (R1 = R2 = H).

IT 18813-68-8P 133286-15-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

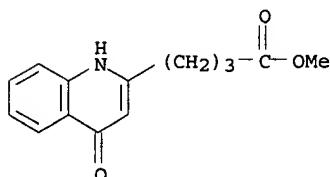
RN 18813-68-8 CAPLUS

CN 4(1H)-Quinolinone, 2-hexyl- (9CI) (CA INDEX NAME)



RN 133286-15-4 CAPLUS

CN 2-Quinolinebutanoic acid, 1,4-dihydro-4-oxo-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1991:471607 CAPLUS

DN 115:71607

TI Preparation of arylmethoxyquinolines (tetrazolylbiphenylmethoxyquinolines) as cardiovascular agents.

IN Roberts, David Anthony; Russell, Simon Thomas; Pearce, Robert James

PA Imperial Chemical Industries PLC, UK

SO Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DT Patent

LA English

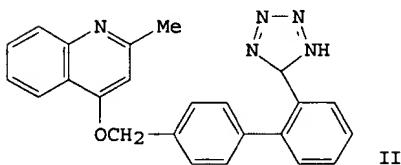
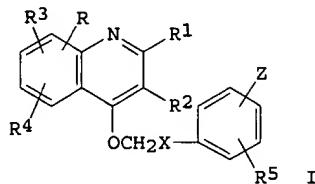
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI EP 412848	A2	19910213	EP 1990-308855	19900810
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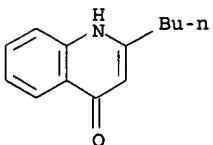
09945325

EP 412848	A3	19910410	
EP 412848	B1	19950118	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE		
CA 2023229	AA	19910212	CA 1990-2023229 19900802
NO 9003525	A	19910212	NO 1990-3525 19900810
GB 2234748	A1	19910213	GB 1990-17616 19900810
GB 2234748	B2	19930630	
AU 9060955	A1	19910214	AU 1990-60955 19900810
AU 623546	B2	19920514	
ZA 9006358	A	19910424	ZA 1990-6358 19900810
HU 54991	A2	19910429	HU 1990-4961 19900810
DD 298922	A5	19920319	DD 1990-343371 19900810
CN 1050187	A	19910327	CN 1990-106923 19900811
JP 03169863	A2	19910723	JP 1990-214223 19900813
JP 3010056	B2	20000214	
US 5444071	A	19950822	US 1993-58825 19930504
PRAI	GB 1989-18402	A	19890811
	GB 1990-3187	A	19900213
	US 1990-565764	B1	19900810
OS	MARPAT	115:71607	
GI			



AB Title compds. I (R1 = H, alkyl, cycloalkyl, Ph, substituted alkyl; R2 = H, alkyl, cycloalkyl, HO2C, NC, O2N, Ph, phenylalkyl; R3, R4 = H, alkyl, alkoxy, fluoroalkoxy, halo, HO, F3C, NC, O2N, H2O, etc. R3R4 = C1-4 alkyleneoxy attached to adjacent C; R, R5 = H, alkyl, alkoxy, halo, F3C, NC, O2N; X = substituted C6H4, bond; Z = 1-tetrazol-5-yl, etc.) or salts thereof, useful for treatment of hypertension and congestive heart failure, are prep'd. 2-Methyl-4-(2-(2-triphenylmethyl-2H-tetrazol-5-yl)biphenyl-4-yl)methoxy]quinoline (prep'n. from 2-methyl-4-quinolone and the corresponding bromomethylbiphenyl given), dioxane.HCl and H2O were kept for 72 h to give title compd. II.HCl (III). In tests for antagonizing angiotensin II in vitro and in vivo, III showed IC50 1.7 times. 1-8M, pA2 8.95, and ED50 of 0.5 mg/kg, i.v. In addn. I demonstrated a significant redn. in blood pressure at 50 mg/kg or less, without any overt toxicol. or other unsatd. pharmacol. effects. A large no. of I and intermediates were prep'd. Pharmaceutical formulations comprising I are given.

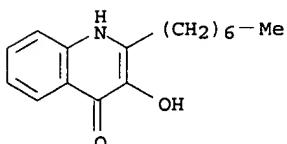
IT 135015-64-4
RL: RCT (Reactant)
(reaction of, in prepn. of arylmethoxyquinoline antihypertensives)
RN 135015-64-4 CAPLUS
CN 4(1H)-Quinolinone, 2-butyl- (9CI) (CA INDEX NAME)



09945325

L14 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 2001:914725 CAPLUS
DN 136:364772
TI A quorum sensing-associated virulence gene of *Pseudomonas aeruginosa* encodes a LysR-like transcription regulator with a unique self-regulatory mechanism
AU Cao, Hui; Krishnan, Gomathi; Goumnerov, Boyan; Tsongalis, John; Tompkins, Ronald; Rahme, Laurence G.
CS Department of Surgery, Harvard Medical School, Massachusetts General Hospital and Boston Shriners Institute, Boston, MA, 02114, USA
SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(25), 14613-14618
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
AB The human opportunistic pathogen *Pseudomonas aeruginosa* strain PA14 infects both plants and animals. Previously, using plants to screen directly for *P. aeruginosa* virulence-attenuated mutants, we identified a locus, *pho34B12*, relevant in mammalian pathogenesis. Here, nonsense point mutations in the two opposing ORFs identified in the *pho34B12* locus revealed that one of them, *mvfR* (multiple virulence factor Regulator), is able to control all of the phenotypes that mutant *phoA34B12* displays. Both genetic and biochem. evidence demonstrate that the *mvfR* gene encodes a LysR-like transcriptional factor that pos. regulates the prodn. of elastase, phospholipase, and of the autoinducers, 3-oxo-dodecanoyl homoserine lactone (PAI 1) and 2-heptyl-3-hydroxy-4-quinolone (PQS), as well as the expression of the *phnAB* operon, involved in phenazine biosynthesis. We demonstrate that the *MvfR* protein is membrane-assoccd. and acts as a transcriptional activator until cells reach stationary phase, when a unique neg. feedback mechanism is activated to signal the downregulation of the *MvfR* protein. This work reveals an unprecedented virulence mechanism of *P. aeruginosa* and identifies a unique indispensable player in the *P. aeruginosa* quorum-sensing cascade.
IT 108985-27-9, 2-Heptyl-3-hydroxy-4-quinolone
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(*MvfR* controls prodn. of; quorum sensing-assoccd. virulence gene of *Pseudomonas aeruginosa* encodes LysR-like transcription regulator with unique self-regulatory mechanism)
RN 108985-27-9 CAPLUS
CN 4(1H)-Quinolinone, 2-heptyl-3-hydroxy- (9CI) (CA INDEX NAME)

not min a

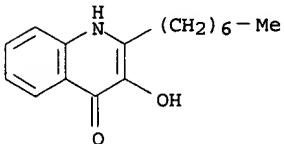


RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 2001:729021 CAPLUS
DN 136:17770
TI Interference with *Pseudomonas* quinolone signal synthesis inhibits virulence factor expression by *Pseudomonas aeruginosa*
AU Calfee, M. Worth; Coleman, James P.; Pesci, Everett C.
CS Department of Microbiology and Immunology, East Carolina University School of Medicine, Greenville, NC, 27858, USA
SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(20), 11633-11637
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
AB *P. aeruginosa* is an opportunistic pathogen that controls numerous virulence factors through intercellular signals. This bacterium has 2 quorum-sensing systems (*las* and *rhl*), which act through the intercellular signals N-(3-oxododecanoyl)-L-homoserine lactone (3-oxo-C12-HSL) and N-butyryl-L-homoserine lactone (C4-HSL), resp. *P. aeruginosa* also produces a 3rd intercellular signal that is involved in virulence factor regulation. This signal, 2-heptyl-3-hydroxy-4-quinolone [referred to as the *Pseudomonas* quinolone signal (PQS)], is a secondary metabolite that is part of the *P. aeruginosa* quorum-sensing hierarchy.

PQS can induce both lasB (encodes LasB elastase) and rhlI (encodes the C4-HSL synthase) in *P. aeruginosa* and is produced maximally during the late stationary phase of growth. Because PQS is an intercellular signal that is part of the quorum-sensing hierarchy and controls multiple virulence factors, basic studies designed to elucidate its biosynthetic pathway were begun. The data strongly suggest that anthranilate is a precursor for PQS. *P. aeruginosa* converted radiolabeled anthranilate into radioactive PQS, which was bioactive. An anthranilate analog (Me anthranilate) would inhibit the prodn. of PQS. This analog was then shown to have a major neg. effect on elastase prodn. by *P. aeruginosa*. These data provide evidence that precursors of intercellular signals may provide viable targets for the development of therapeutic treatments that will reduce *P. aeruginosa* virulence.

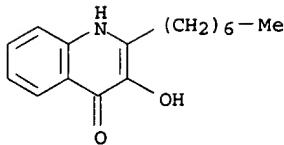
IT 108985-27-9, 2-Heptyl-3-hydroxy-4-quinolone
 RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process)
 (interference with *Pseudomonas* quinolone signal synthesis inhibits
 virulence factor expression by *Pseudomonas aeruginosa*)
 RN 108985-27-9 CAPLUS
 CN 4(1H)-Quinolinone, 2-heptyl-3-hydroxy- (9CI) (CA INDEX NAME)



RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:296908 CAPLUS
 DN 133:218416
 TI The *Pseudomonas* quinolone signal regulates rhl quorum sensing in *Pseudomonas aeruginosa*
 AU McKnight, Susan L.; Iglesias, Barbara H.; Pesci, Everett C.
 CS Department of Microbiology and Immunology, East Carolina University School of Medicine, Greenville, NC, 27858, USA
 SO Journal of Bacteriology (2000), 182(10), 2702-2708
 CODEN: JOBAAY; ISSN: 0021-9193
 PB American Society for Microbiology
 DT Journal
 LA English
 AB The opportunistic pathogen *Pseudomonas aeruginosa* uses intercellular signals to control the d.-dependent expression of many virulence factors. The las and rhl quorum-sensing systems function, resp., through the autoinducers N-(3-oxododecanoyl)-L-homoserine lactone and N-butyryl-L-homoserine lactone (C4-HSL), which are known to pos. regulate the transcription of the elastase-encoding gene, lasB. Recently, the authors reported that a second type of intercellular signal is involved in lasB induction. This signal was identified as 2-heptyl-3-hydroxy-4-quinolone and designated the *Pseudomonas* quinolone signal (PQS). PQS was detd. to be part of the quorum-sensing hierarchy since its prodn. and bioactivity depended on the las and rhl quorum-sensing systems, resp. In order to define the role of PQS in the *P. aeruginosa* quorum-sensing cascade, lacZ gene fusions were used to det. the effect of PQS on the transcription of the quorum-sensing system genes lasR, lasI, rhlR, and rhlI. The authors found that in *P. aeruginosa*, PQS caused a major induction of rhlI'-lacZ and had lesser effects on the transcription of lasR'-lacZ and rhlR'-lacZ. The authors also obsd. that the transcription of both rhlI'-lacZ and lasB'-lacZ was cooperatively effected by C4-HSL and PQS. Addnl., the authors present data indicating that PQS was not produced maximally until cultures reached the late stationary phase of growth. Taken together, these results imply that PQS acts as a link between the las and rhl quorum-sensing systems and that this signal is not involved in sensing cell d.
 IT 108985-27-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (Pseudomonas quinolone signal regulates rhl quorum sensing in *Pseudomonas aeruginosa*)
 RN 108985-27-9 CAPLUS
 CN 4(1H)-Quinolinone, 2-heptyl-3-hydroxy- (9CI) (CA INDEX NAME)

09945325



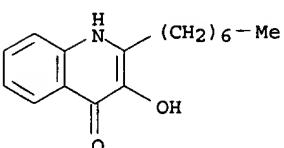
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1999:684507 CAPLUS
DN 132:1973
TI Quinolone signaling in the cell-to-cell communication system of *Pseudomonas aeruginosa*
AU Pesci, Everett C.; Milbank, Jared B. J.; Pearson, James P.; McKnight, Susan; Kende, Andrew S.; Greenberg, E. Peter; Iglesias, Barbara H.
CS Department of Microbiology and Immunology, East Carolina University School of Medicine, Greenville, NC, 27858, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1999), 96(20), 11229-11234
CODEN: PNASAB, ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
AB Numerous species of bacteria use an elegant regulatory mechanism known as quorum sensing to control the expression of specific genes in a cell-dependent manner. In Gram-neg. bacteria, quorum sensing systems function through a cell-to-cell signal mol. (autoinducer) that consists of a homoserine lactone with a fatty acid side chain. Such is the case in the opportunistic human pathogen *Pseudomonas aeruginosa*, which contains two quorum sensing systems (las and rhl) that operate via the autoinducers, N-(3-oxododecanoyl)-L-homoserine lactone and N-butyryl-L-homoserine lactone. The study of these signal mols. has shown that they bind to and activate transcriptional activator proteins that specifically induce numerous *P. aeruginosa* virulence genes. We report here that *P. aeruginosa* produces another signal mol., 2-heptyl-3-hydroxy-4-quinolone, which has been designated as the *Pseudomonas* quinolone signal. It was found that this unique cell-to-cell signal controlled the expression of lasB, which encodes for the major virulence factor, LasB elastase. We also show that the synthesis and bioactivity of *Pseudomonas* quinolone signal were mediated by the *P. aeruginosa* las and rhl quorum sensing systems, resp. The demonstration that 2-heptyl-3-hydroxy-4-quinolone can function as an intercellular signal sheds light on the role of secondary metabolites and shows that *P. aeruginosa* cell-to-cell signaling is not restricted to acyl-homoserine lactones.
IT 108985-27-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(quinolone signaling in cell-to-cell communication system of *Pseudomonas aeruginosa*)
RN 108985-27-9 CAPLUS
CN 4(1H)-Quinolinone, 2-heptyl-3-hydroxy- (9CI) (CA INDEX NAME)

102(a)

10, 11, 12, 13, 14, 19-42

10, 11, 12, 13, 14, 19-42
1, 2, 4, 10, 11, 12, 13, 14, 19-42



RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1998:574237 CAPLUS
DN 129:328033
TI Quinolones from a bacterium and tyrosine metabolites from its host sponge, *Suberea creba* from the Coral Sea
AU Debitus, Cecile; Gueilla, Graziano; Mancini, Ines; Waikedre, Jean; Guemas, Jean-Pierre; Nicolas, Jean Louis; Pietra, Francesco
CS ORSTOM, Centre de Noumea, Noumea, New Caledonia
SO Journal of Marine Biotechnology (1998), 6(3), 136-141
CODEN: JMBOEW; ISSN: 0941-2905

09945325

PB Springer-Verlag New York Inc.

DT Journal

LA English

AB A marine bacterium, identified as a pseudomonad, isolated from *Suberea creba* Bergquist, 1995 (Porifera, Dictyoceratida, Verongida, Aplysinellidae) collected along the eastern coast of New Caledonia, gave in culture phenazine- α -carboxamide, 2-n-heptylquinol-4-one, 2-n-nonylquinol-4-one, 2-n-(1'E-nonyl)quinol-4-one, 3-n-heptyl-3-hydroxyquinolin-2,4-dione, a N-oxide-2-n-heptylquinoline deriv., and a benzylidiketopiperazine. None of these products could be detected, at the HPLC-UV sensitivity level, in the sponge exts., which contained instead (+)-aerothionin, homoaerothionin, (+)-aeroplysinin-1, dibromo-, bromochloro-, and dichloroverongiaquinol. 2-N-Heptylquinol-4-one, (+)-aeroplysinin-1, and dibromoverongiaquinol showed strong antibacterial activity in vitro. The latter also proved promising for mariculture, rivaling chloramphenicol as an antibacterial agent in cultures of *Pecten maximus* larvae, while being nontoxic according to the *Artemia salina* test.

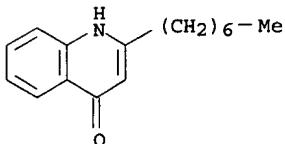
IT 40522-46-1, 2-n-Heptylquinol-4-one

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(antibacterial activity of quinolones from a bacterium and tyrosine metabolites from its host sponge, *Suberea creba* from the Coral Sea)

RN 40522-46-1 CAPLUS

CN 4(1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)



162 (b)

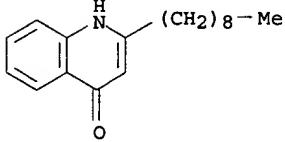
IT 55396-45-7, 2-n-Nonylquinol-4-one

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(quinolones from a bacterium and tyrosine metabolites from its host sponge, *Suberea creba* from the Coral Sea)

RN 55396-45-7 CAPLUS

CN 4(1H)-Quinolinone, 2-nonyl- (9CI) (CA INDEX NAME)



L14 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2002 ACS

AN 1997:233949 CAPLUS

DN 126:277634

TI A new two-step synthesis of quinolone alkaloids based on the regioselective addition of organometallic reagents to 4-silyloxyquinolinium triflates

AU Beifuss, Uwe; Ledderhose, Sabine

CS Institut Organische Chemie, Georg-August-Universitat, Goettingen, D-37077, Germany

SO Synlett (1997), (3), 313-315
CODEN: SYNLES; ISSN: 0936-5214

PB Thieme

DT Journal

LA English

OS CASREACT 126:277634

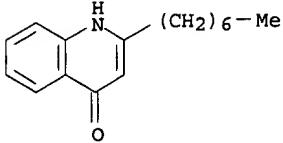
AB Organolithium and Grignard reagents regioselectively add to N-protected 4-silyloxyquinolinium triflates with 38-93% yield. The Cbz-protected C(2) adducts are easily transformed in a single step to give the corresponding 2-substituted 4-quinolones in nearly quant. yield.

IT 40522-46-1P 109072-26-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of quinolone alkaloids by regioselective addn. of organometallics to siloxyquinolinium triflates)

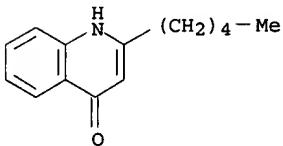
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RN 40522-46-1 CAPLUS
CN 4 (1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)

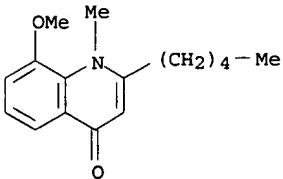


Compound 1

RN 109072-26-6 CAPLUS
CN 4 (1H)-Quinolinone, 2-pentyl- (9CI) (CA INDEX NAME)

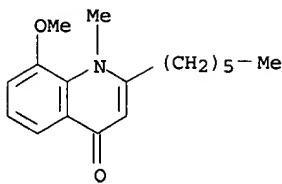


L14 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1995:218752 CAPLUS
DN 122:51400
TI 2-Alkyl-4-quinolone alkaloids and cinnamic acid derivatives from Esenbeckia almawillia
AU Guilhon, Giselle M. S. P.; Baetas, Cristina S.; Maia, Jose Guilherme S.; Conserva, Lucia M.
CS Departamento de Quimica, Universidade Federal do Para, Belem-PA, 66040, Brazil
SO Phytochemistry (1994), 37(4), 1193-5
CODEN: PYTCAS; ISSN: 0031-9422
DT Journal
LA English
AB Chem. investigation of Esenbeckia almawillia afforded, in addn., to a known furocoumarin and a cinnamaldehyde deriv., three new quinolone alkaloids, 8-methoxy-1-methyl-2-pentyl-, 8-methoxy-1-methyl-2-hexyl- and 8-methoxy-1-methyl-2-heptyl-4-quinolone, and a cinnamic acid deriv., 3-methoxy-4,5-methylenedioxy cinnamic acid Me ester. All compds. were elucidated through anal. of spectroscopic data.
IT 159979-55-2
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(Alkylquinolone alkaloids and cinnamic acid derivs. from Esenbeckia almawillia)
RN 159979-55-2 CAPLUS
CN 4 (1H)-Quinolinone, 8-methoxy-1-methyl-2-pentyl- (9CI) (CA INDEX NAME)

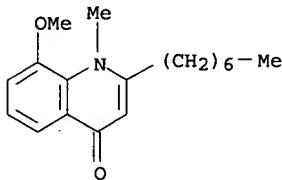


IT 159979-56-3 159979-57-4
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(Alkylquinolone alkaloids from Esenbeckia almawillia)
RN 159979-56-3 CAPLUS
CN 4 (1H)-Quinolinone, 2-hexyl-8-methoxy-1-methyl- (9CI) (CA INDEX NAME)

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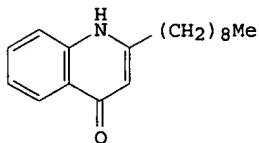


RN 159979-57-4 CAPLUS
CN 4(1H)-Quinolinone, 2-heptyl-8-methoxy-1-methyl- (9CI) (CA INDEX NAME)



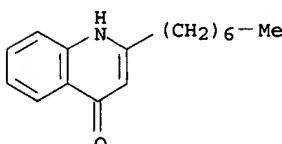
162(6)

L14 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1977:100808 CAPLUS
DN 86:100808
TI Mechanism of the effect of some quinoline alkaloids on the respiratory chain of mitochondria
AU Akimenko, V. K.; Kozlovskii, A. G.; Medentsev, A. G.; Golovchenko, N. P.; Arinbasarov, M. U.
CS Inst. Biochem. Physiol. Microorg., Pushchino, USSR
SO Biokhimiya (1976), 41(12), 2220-8
CODEN: BIOHAO
DT Journal
LA Russian
GI



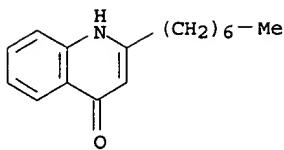
I

AB The quinoline alkaloids, 2-n-nonyl-4-quinolone (I) [55396-45-7], 2-n-heptyl-4-quinolone [40522-46-1], 2-(n-DELTA.1-nononyl)-4-quinolone [60783-01-9], 1-ethyl-2-nonyl-4-quinolone [61926-23-6], and 2-nonyl-4-ethoxyquinoline [61926-24-7], inhibited electron transfer in the respiratory chain of rat liver and Candida lipolytica mitochondria. The effect of the alkaloids was localized between cytochromes b and c. In addn. to their inhibiting effect on electron transport in the respiratory chain the alkaloids also inhibited exogenous NADH dehydrogenase [9079-67-8] in the yeast mitochondria. The alkaloids also stimulated mitochondrial ATPase [9000-83-3]. O-alkylation of 2-N-nonyl-4-quinolone allowed differentiation of the inhibiting and uncoupling properties of this alkaloid.
IT 40522-46-1 55396-45-7 61926-23-6
RL: BIOL (Biological study)
(electron transport system inhibition by, in Candida and liver)
RN 40522-46-1 CAPLUS
CN 4(1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)

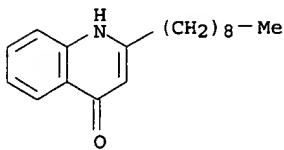


162(6) *Amphetamine*

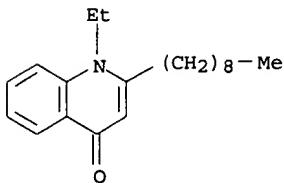
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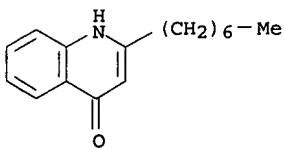
RN 55396-45-7 CAPLUS
CN 4 (1H)-Quinolinone, 2-nonyl- (9CI) (CA INDEX NAME)



RN 61926-23-6 CAPLUS
CN 4 (1H)-Quinolinone, 1-ethyl-2-nonyl- (9CI) (CA INDEX NAME)



L14 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2002 ACS
AN 1976:573924 CAPLUS
DN 85:173924
TI Alkaloids of microorganisms
AU Kozlovskii, A. G.
CS Otd. Bioorg. Khim., Inst. Biokhim. Fiziol. Mikroorg., Pushchino, USSR
SO Biokhim. Fiziol. Mikroorg. (1975), 74-7. Editor(s): Ivanov, M. V.
Publisher: Akad. Nauk SSSR, Nauchn. Tsentr Biol. Issled., Pushchino, USSR.
CODEN: 33NYAV
DT Conference
LA Russian
AB Of 19 Penicillium strains examd., 5 produced significant amts. of alkaloids. An alkaloid was isolated from P. roqueforti and characterized as roquefortine. A quinoline alkaloid was isolated from P. cyclopium and identified as 2,3-dihydroxy-4-phenylquinoline. Pseudomonas aeruginosa produced a mixt. of alkaloids, the major components of which were: (a) 2-nonyl-4-quinolinone (pseudane IX), (b) 2-heptyl-4-quinolinone (pseudane VII), (c) 2-(.DELTA.1'-nonenyl)-4-quinolinone (.DELTA.1-pseudane IX), and (d) 2-(.DELTA.1'-heptenyl)-4-quinolinone (.DELTA.1-pseudane VII). Indolyl-3-acetic acid and a series of hydroxyindolyl-3-acetic acid derivs. were isolated from Aspergillus niger.
IT 40522-46-1 55396-45-7
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(of Pseudomonas aeruginosa)
RN 40522-46-1 CAPLUS
CN 4 (1H)-Quinolinone, 2-heptyl- (9CI) (CA INDEX NAME)



RN 55396-45-7 CAPLUS
CN 4 (1H)-Quinolinone, 2-nonyl- (9CI) (CA INDEX NAME)

09945325

